Terramar
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August 17, 2010

The Honorable James D. Boyd
Presiding Member
California Energy Commission
1516 Ninth St.
Sacramento, Ca. 95814

The Honorable Anthony Eggert
Associate Member
California Energy Commission
1516 Ninth St.
Sacramento, Ca. 95814

Hearing Officer Paul Kramer
California Energy Commission
1516 Ninth St.
Sacramento, Ca. 95814

Re: Carlsbad Energy Center Project (CECP) 07-AFC-6

STATE OF CALIFORNIA
State Energy Resources
Conservation and Development Commission

In the Matter of:	)	Docket No. 07-AFC-6
Application for Certification for	)	
the Carlsbad Energy Center Project	)	Terramar's Opening
Carlsbad Energy Center, LLC	)	Brief, POS, Declaration of Service

Dear Commissioner Boyd, Commissioner Eggert and Hearing Officer Kramer,

Please find enclosed Terramar's Opening Brief, POS List and Declaration of Service for the Carlsbad Energy Center Project.

Also, Terramar would like to request that the Commission accept the following submissions as part of the Carlsbad Energy Center Project evidentiary record:

1. CEC staff counsel R. Ratliff, Docket Log 56916, Richard Ratliff dated May 28, 2010 Entitled, "Memo: Post-Evidentiary Hearing Developments for Carlsbad Energy Center"

2. K. Siekmann, Docket Log 55710, "Terramar's Motion to Admit Supplemental Documents into Evidentiary Records".
3. City of Carlsbad, Docket Log 55760, "Response to the City of Carlsbad & Carlsbad Redevelopment Agency to Admit Supplemental Documents into the Evidentiary Record".
4. South Carlsbad Coastal Redevelopment Agency, Docket # 56006, City of Carlsbad Comments to CECP Reply in Opposition to the Response to Carlsbad Redevelopment Agency".

During this entire process Terramar interveners have developed a great respect for just how much dedication and hard work the California Energy Commissioners and Staff must give to their jobs. We wish to thank you for all that and more.

Please accept our requests and brief submission.

Sincerely,

Kerry Siekmann

Kerry Siekmann
Terramar Intervener

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STATE OF CALIFORNIA
State Energy Resources
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EXECUTIVE SUMMARY

Terramar is a beach neighborhood of approximately 250 homes located less than one half mile from the Encina Power Station (EPS) property. The neighborhood has been in existence for over 50 years. Throughout this time period, Terramar residents have understood the power solutions that the Encina Power Station has provided to San Diego County and especially the Carlsbad community.

The days of the Encina Power Station's usefulness are coming to a close. Its old technology and use of ocean water for "once through cooling" has made it obsolete as it was built long before CEQA Law was in existence. Terramar residents look forward to the end of the negative environmental impacts Encina has imposed upon the wild life of the ocean and our community. We welcome the day when our precious coastline can be employed for more appropriate coastal uses.

In our brief, Terramar notes that imposing another power station, the proposed Carlsbad Energy Center Project (CECP), on the coastline will result in numerous significant, unmitigated (direct and indirect) environmental impacts in the areas of:

air quality, biological, visual, noise and public safety.

Our brief emphasizes that the 2017 shutdown of Encina Units 1-5 produces a significantly different basis for evaluation of the proposed CECP that was sorely missed in the FSA. This "foreseeable event" must be fully evaluated per CEQA Law.

Terramar joins in and supports the City of Carlsbad and Power of Vision in their briefs regarding CEQA and LORS issues. In our brief, we have chosen to reply on one issue of LORS. As discussed in the Hearings on Feb. 4, 2010, the CEC must support the Carlsbad Fire Department on their requested road widths for the upper "rim" road and the emergency access in the "pit" or the project would be in violation of the California Fire Code.

Terramar also contends that the proposed CECP is not coastal dependent and does not comply with the Coastal Act. The project is an air-cooled plant that is not dependent on coastal water access. The shutdown of Encina will end the coastal dependent industrial use, and will eliminate the impacts to marine resources associated with seawater intake uses. These impacts are inconsistent with the Coastal Act Section 30231, and were not part of the original proposal.

> "*Another critical component of the CECP generating units is that the project will be dry air cooled, thereby avoiding the need to connect to the existing Encina Power Station's sea water once-through cooling system"*. (From the Application for Certification project description introduction.)

The fact that the project did not include seawater at one time makes it clear that it can be located independent of the ocean, and does not meet the definition of a coastal dependent use within the Coastal Act. A finding by the CEC that the project is a coastal dependent industrial use is not supported by substantial evidence.

Terramar realizes that even though the proposed CECP violates CEQA Law and LORS, the CEC could override these violations if they find:

1. "benefits of the project outweigh the unavoidable significant adverse environmental effects".
2. the project is "required for public convenience and necessity and that there are no more prudent and feasible means of achieving such public convenience and necessity."

As set forth in our brief, the CEC cannot make the required findings because there is no substantial evidence to support a finding that the benefits outweigh the significant impacts. Furthermore, because the power plant will not supply power to the local community, there is not support for a finding that the plant is required for public convenience and necessity. Therefore, Terramar requests that the California Energy Commission deny the CECP Application for Certification.

Intervener Terramar Association hereby submits its Opening Brief. Terramar has attempted to address the briefing topics raised by the CEC in the order in which the topics were presented.

PROJECT'S ENVIRONMENTAL IMPACTS-
1A. THE CARLSBAD ENERGY CENTER PROJECT ("CECP") WILL RESULT IN NUMEROUS SIGNIFICANT, UNMITIGATED, ENVIRONMENTAL IMPACTS.

The proposed CECP will increase and intensify unmitigated environmental impacts, both directly and on a cumulative basis. The Final Staff Assessment ("FSA") has failed to adequately identify and mitigate these impacts. The Applicant has not met its burden to provide the substantial evidence necessary to approve the project as required under California Code of Regulations, Title 20, Chapter 5, Article 3, § 1748.

There are significant unmitigated impacts in the following areas:

a. BIOLOGICAL IMPACTS.

i. The FSA incorrectly concluded that no impingement and entrainment impacts will be caused by the CECP.

The proposed CECP will result in significant, unmitigated impingement and entrainment impacts resulting from the use of an ocean water desalinization unit for its operation. The CECP application proposes to construct a desalinization unit using the permitted intake and discharge water facilities of the Encina Power Station. The Encina Power Station currently uses this intake and discharge water facility for its "once-through cooling system." The Carlsbad Energy Center Project proposes to "*piggy back*" its proposed desalination unit utilizing Encina's permitted ocean water intake and discharge facilities. (FSA, pp. 1-2.)

"Once-through cooling" results in impacts commonly referred to as impingement and entrainment impacts, an issue of utmost concern to Terramar, and also the California Coastal Commission and other state agencies. As noted in the hearings from Ms. Vahidi,

> *"And also impingement and entrainment due to once-through cooling. And that was, at that time, the impingement and entrainment issues were the biggest major issue for the Coastal Commission" (Feb. 1,'10 pp. 180-181.)*

> *"MR. RATLIFF: And has the Coastal Commission indicated that entrainment and impingement are the most important consideration that they've had with the Energy Commission's licensing cases on the coast?*
> *MS. VAHIDI: Yes, absolutely." (Testimony Feb. 1, '10 p. 182.)*

The FSA incorrectly concluded that the CECP would not result in impingement and entrainment impacts.

> *The proposed CECP would not withdraw water from Agua Hedionda Lagoon, and therefore would not result in impingement or entrainment impacts. The*

National Marine Fisheries Service (NMFS), U. S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG) concur with staff's determination (Chesney 2009; Koski 2009; Paznokas 2009). (FSA p. 4.2-1.)

The FSA basis for this conclusion is that the CECP will be using water that the Encina plant has left over from its cooling process:

City of Carlsbad Comment – Impingement and Entrainment of Marine Organisms. *Entrainment impacts were analyzed in the PSA; however staff was not able to make a determination regarding the impact's significance. Staff indicated at the PSA workshop that entrainment impacts would be less than significant based on the "credit" associated with retirement of EPS Units 1 through 3.*

Response: *Retirement of Units 1 through 3 was not the basis for determining that there would be no entrainment impacts from the proposed CECP. The determination was based on the fact that CECP would not draw additional water beyond what is permitted for the existing EPS; rather, it would use a portion of the discharge water from Units 4 and 5 after the water has been used for cooling. (FSA 4.2-29; See also FSA, p. 4.2-18)*

The problem with this logic is two fold. First, the CECP will cause additional water intake beyond what the Encina Facility will need. Second, the Encina Facility intake will terminate a mere 2 years after operation of the CECP begins, assuming a start date in 2015.[1] These issues are discussed below.

ii. The CECP will cause additional water intake beyond the needs of the Encina Facility, thus it is directly creating impingement and entrainment impacts.

When the Encina facility is not operating, which is most of the time, the CECP can require more water (to meet its maximum daily needs) than what Encina intakes for daily system circulation. The FSA Staff acknowledged that some of the water intake is attributable to the CECP:

"The proposed desalination system will utilize EPS' existing, permitted ocean water intake and outfall discharge facilities. Approximately 4.32 million gallons of ocean water per day (mgd) would generate approximately 700,000 gallons of purified industrial water needed during peak generation. Of this 4.32 mgd needed for CECP's operation, the applicant would be responsible for 1.32 mgd, given the

[1] The Administrative Record demonstrates that the construction of the CECP would take 25 months to complete per the FSA page 1-2. Although the FSA assumed that construction would begin in 2010, a more realistic schedule is that construction may begin by 2012, making the plant operational by 2015.

minimum daily intake of 3 mgd that EPS uses for daily system circulation, regardless of its level of operation on Units 1- 5." (FSA p. 3-2)

Since the Applicant is responsible for the intake of water, the applicant is also responsible for the associated impingement and entrainment impacts created as a direct result of the proposed CECP. As long as Encina units 4-5 are viable but are not in operation, the proposed CECP would be responsible for a maximum of 1.32 mgd of withdrawn water from the Agua Hedionda Lagoon. The proposed CECP would be directly responsible for unmitigated impacts of impingement and entrainment.

Furthermore, it is not clear that it is feasible for the CECP to use the flow from Encina units 4 and 5. Although the Encina minimum daily intake is 3 mgd, that intake occurs in a short time, around one half hour per day, in order to scour the condensers for units 4 and 5. Scouring must be done at high water velocity. However, the CECP will need a slow steady supply of water for at least 18 hours a day. The CECP should therefore be responsible for the entire 4.32 mgd it needs, separate from the Encina facility.

iii. Assuming a start date in 2015, the Encina Facility intake will terminate a mere 2 years after operation of the CECP begins, and any remaining water intake would be wholly a direct impact of the CECP.

In a memo dated May 27, 2010 CEC Staff "called to the attention" the new policy entitled "Statewide Water Quality Control Policy on the use of Coastal and Estuarine Waters for Power Plant Cooling." This policy requires the Encina facility to reduce its impingement and entrainment impacts by 93 % of its average flow by 2017. (See Policy, pp. 4 and 14.) This will essentially result in the retirement of the entire Encina facility, and the complete elimination of the impingement and entrainment impacts that it causes.

According to the FSA, once units 4 and 5 are decommissioned, and if the project is not built, then the removal of the power plant and rezoning of the site to a non-industrial use could move forward.

Although the time frame is not known, it is assumed that at some point in the future, the remaining generation Units (4 and 5) within the EPS generation facility not decommissioned under the CECP project, will also be decommissioned, in accordance with long-range City of Carlsbad plans. At that time, the City envisions complete removal of the existing EPS generation plant, including the generation building and substation, and re-zoning the entire site to non-industrial coastal dependent uses. (FSA, pp. 4.12-24 through 4.12-25.)

However, if the CECP facility is approved, it will continue to require the intake of ocean water for its operational needs. This means that the proposed desalination unit will continue and extend unmitigated negative impacts of impingement and entrainment to coastal lands and waters. In fact, the industry will need to create a new term of "once through operational facilities" for units that employ ocean water for combined cycle use creating impacts of impingement and entrainment.

The FSA was based on an erroneous assumption that the Encina facility would continue to operate. Rather than assuming that for all but the first 2 years of operation the intake for the Encina Plant would be non-existent, the FSA erroneously assumed that retirement of units 4 and 5 is uncertain, and therefore did not attribute future impingement and entrainment impacts to CECP. Ms. Vahidi during the Hearings stated:

> *"MS. SIEKMANN: But if units 4 and 5 are shut down --*
> *MS. VAHIDI: That was my assumption, but they're not going to be shut down anytime soon. I mean, there is eventual, I guess at some point in the future, but I don't know. That wasn't my assumption."* (Feb. 1, p. 259.)

Contrary to Ms. Vahidi's assumption that the units 4 and 5 will not be shut down "anytime soon", there is evidence in the record that units 4 and 5 will be shut down no later than 2017, which would be only 2 years after operation commences for the CECP, assuming operation commences in 2015. Thus, the CECP will result in entrainment and impingement impacts for the maximum 4.32 mgd commencing in 2017. These impacts were not addressed in the FSA. CEQA requires that the whole of the action be considered over the life of the project, not just at start-up. (Public Resources Code § 21065; CEQA Guidelines § 15378.)

iv. The Conditions of Certification for Biological Impacts are not sufficient to reduce the impacts of impingement and entrainment to below levels of significance.

The Applicant recognized that there is a potential for future impacts, but suggested that there will be future mitigation for these impacts, such as redesign of the pump, and in fact urged the Regional Water Quality Control Board to delay any decisions about the use of ocean water in the future.

> *Notwithstanding the foregoing, CECP is a dry-cooled facility. CECP does not propose to use seawater for cooling purposes as contemplated by Water Code section 13142.5(b), nor does CECP propose to "draw in" seawater, to construct a new intake structure, or to increase capacity in an existing intake structure. Instead, the wastewater discharge stream from EPS' permitted outfall is proposed as the water supply source for CECP. Once Units 4 and 5 are retired at some future unknown date (the retirement of which is not part of CECP), there will be numerous options for minimizing losses due to entrainment if the flow is reduced to only the 4.32 mgd for the CECP. A large portion of that 4.32 mgd is merely passing through a pump and being used for dilution. Thus, the entrainment survival for organisms would be expected to be high and could be further increased by modifying pump design, if necessary. This information, coupled with the fact that section 13142.5(b) expressly recognizes the availability of "mitigation measures" as one way 'to minimize the intake and mortality of all forms of marine life" (Voices of the Wetlands, 157 Cal.App.4th at 1351) evidences further support for our position that the Regional Board should delay any*

decisions on CECP water use in the absence of Units 4 and 5. (John McKinney Letter dated 9/22/2009 to Brian Kelly, RWQCB, emphasis added)

The FSA has failed to acknowledge the significant impact that will commence in 2017 that would result from the CECP intake at Agua Hedionda as a result of the CECP, and to the extent that the impact was recognized at all, failed to provide adequate mitigation.

"*However, if EPS Units 4 and 5 were to cease operations altogether and their service and auxiliary water pumps were no longer needed, the CECP would require intake water from Agua Hedionda Lagoon. If this were to occur, coordination with the resource agencies regarding consistency with Clean Water Act Section 316(b) and the federal and state endangered species acts would be required (refer to Condition of Certification BIO-9 [Future Agency Coordination])"* (FSA p. 4.2-16.)

BIO-9[2] merely requires information and coordination with the agencies, but does not specify what level of biological impact will be acceptable in the future. There is no certainty that the impacts will be mitigated to below significance in the future. In fact, this mitigation measure ties the future hands of the various regulatory agencies, because it will preclude the agencies from requiring the complete cessation of ocean water intake in 2017. The applicant's letter to the RWQCB already gives the indication that cessation is not an option, and that the applicant will want to explore other ways of mitigating the impacts, such as modifying the pump design. The FSA has failed to provide the CEC with the information it needs to identify and mitigate these impacts prior to making its decision.

CEQA Guidelines require agencies to adopt feasible mitigation measures that would substantially lessen the significant adverse environmental impacts. (Cal. Pub. Res. Code § 21002; 14 CCR §15126.4(a)(1).) The measures must be fully enforceable. The Guidelines also state, "measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." (14 CCR §15126.4(a)(1)(B).) However, it is ordinarily inappropriate for an agency to defer formulation of a mitigation measure to the future. (*Id.*) ("Formulation of mitigation measures should not be deferred until some future time.")

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[2] *Future Agency Coordination*
BIO-9 In the event that EPS Units 4 and 5 (and their pumps that supply discharge water for desalination purposes by the CECP) cease to operate -- and the CECP would require intake of ocean water -- the project owner shall inform the appropriate resource agencies (i.e., NMFS, USFWS, and CDFG), and coordinate regarding the compliance with Clean Water Act Section 316(b), and/or the Endangered Species Act requirements, as necessary.

Verification: Annual reports of the operational status of Units 4 and 5 shall be submitted to the CPM, and planned closure of these units shall be reported to the CPM as soon as possible. No later than 30 days prior to decommissioning of Units 4 and 5, the project owner shall provide copies of pertinent records of conversation, permit applications, associated technical reports, and permits (as applicable) to the CPM to verify that federal and state agency coordination has occurred regarding compliance with Clean Water Act Section 316(b) and/or Endangered Species Act requirements, as necessary. (FSA 4.2-26.)

The leading case on this issue is *Sundstrom v. County of Mendocino* 202 Cal.App.3d 296 (Cal.App. 1st Dist. 1988.) The California Court of Appeal held that deferral of mitigation was improper and contrary to the policy of CEQA. (*Id.* at 306-308.) The County in *Sundstrom* approved a conditional use permit authorizing construction of a sewage treatment plant to serve an existing development. In an attempt to address hydrological problems presented by the irrigation system, the permit applicant proposed future mitigation, specifically, preparation of a hydrological study "which evaluates [the] potential effects of the proposed development," which was to be prepared after the project was approved. (*Id.* at 306.) The court found this deferral inadequate and stated that "[b]y deferring environmental assessment to a future date, the conditions run counter to that policy of CEQA which requires environmental review at the earliest feasible stage in the planning process." (*Id.* at 307-308.) The Court of Appeal then concluded that because the success of mitigation was uncertain, the county could not have reasonably determined that significant effects would not occur and the deferral of mitigation was therefore inadequate. (*Id.* See also *Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777, 794, 32 Cal.Rptr.3d 177 (rejecting mitigation measure requiring submission of acoustical analysis and approval of mitigation measures recommended by analysis because no mitigation criteria or potential mitigation measures were identified.)

Deferral of mitigation may be adequate, if there is substantial evidence to support mitigation measures effectiveness, and a commitment to implement the mitigation measure. (*Sacramento Old City Ass'n v. City Council*, 229 Cal.App.3d 1011, 1027 (Cal. App. 3d Dist. 1991.) There is neither in the case of CECP. There is no evidence that the CECP's impacts of impingement and entrainment can be mitigated in the future, and there is no clear commitment to implement mitigation. CEQA requires that the CEC consider the impacts of impingement and entrainment prior to making its decision. If indeed a pump design can mitigate the issue, there must be substantial evidence in the record, and CEC must require the mitigation as part of the Conditions of Certification.

v. Failure to acknowledge the impingement and entrainment impacts results in a false conclusion that the project will be beneficial to biological resources.

Permanently ending seawater intake is an important environmental benefit, as acknowledged by the FSA in the introduction:

> • *eliminating the daily need for millions of gallons of once-through ocean water* cooling, and its associated fish impingement and biological impacts (entrainment) (FSA p. 1-7.)

However, the CECP is incorrect in claiming, as it does in the introduction, that the CECP is responsible for eliminating this daily need. In actuality, the CECP perpetuates the need for seawater intake, which would otherwise be completely eliminated by the retirement of Units 1-5 by 2017. Furthermore, CEC Staff incorrectly concluded that the amount of intake water for Encina would be greater than the amount of intake water for the CECP:

Staff believes that the correct comparison would be actual OTC pumping levels for Encina units 1-3 (based on recent records) compared to projected actual OTC pumping for CECP. Such would be a more useful "apples to apples" comparison. According to the applicant's records, the 2008 ***actual OTC pumping for Encina units 1-3 was 23.6 mgd. (See, e.g., 2/4/10 Tr. pp. 224-227.) The projected actual OTC requirements for CECP are 420 gallons per minute*** *(Exh. 200, p. 4.9-6), which Staff believes is the equivalent of less than 0.25 mgd (based on 4000 hours/year of operation, the limits of the air permit). Thus, assuming 2008 OTC pumping is a reasonable representative number for baseline pumping, the actual project benefits would be the comparison of 23.6 mgd (baseline) to a maximum 0.25 mgd (with CECP*).
(CEC Staff memo dated May 27, 2010, p. 3.)

Staff looked at the daily intake, but failed to calculate the intake over time. Because the Encina Plant intake will terminate, but the CECP will continue into the future for at least 40 years, the actual intake for the Encina facility will be much greater. If we take the year 2015 as the starting point for the calculation, and calculate the intake for each facility into the future, mathematics tells us that the impacts from the CECP are much greater.

Encina	23.6 mgd x 365 days x 2 years	= 17,228,000,000 g per expected life
CECP	4.32 mgd x 365 days x 40 years	= 63,072,000,000 g per expected life

The actual numbers are approximately 17 billion gallons compared to 63 billion gallons. Just to give you an idea of the enormity of these numbers, let's compare a million to a billion. One *million* seconds is about 12 days, and 1 b*illion* second is almost 32 years. The severity of each billion gallons of impact cannot be overstated. Even if the CECP is only operating at 40%, then that would still be about 25 billion gallons. The FSA fails to address this impact, and any decision by the CEC to approve the CECP, without addressing the impingement and entrainment impacts outlined above, would not be supported by substantial evidence.

vi. To the extent that the FSA compared the CECP to the permitted intake of the Encina Facility, the FSA used an improper baseline.

In some places in the FSA, the FSA compared the CECP to the permitted intake of the Encina power plant.

The proposed desalination system will utilize EPS' existing, permitted ocean water intake and outfall discharge facilities. Approximately 4.32 million gallons of ocean water per day (mgd) would generate approximately 700,000 gallons of purified industrial water needed during peak generation. Of this 4.32 mgd needed for CECP's operation, the applicant would be responsible for 1.32 mgd, given the minimum daily intake of 3 mgd that EPS uses for daily system circulation, regardless of its level of operation on Units 1- 5. If CECP is approved and operational, EPS Units 1-3 will cease to operate, while EPS Units 4-5 will continue to operate. ***EPS is permitted to use a maximum of 857 mgd of ocean water; of this number, Units 1-3 comprise 225 mgd, and Units 4-5 are***

responsible for 632 mgd. Given that EPS flows are permitted to operate from a minimum of 3 mgd, to a maximum of 857 mgd, the CECP's retirement of EPS Units 1-3 would reduce maximum, allowed seawater flows by over 26 percent (from 857mgd down to 632 mgd). (FSA, p. 3-2.)

However, a recent California Supreme Court case has made it clear that using the "permitted" amount of water being drawn down, rather than the existing amount of water begin drawn down, is improper. See *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310; 106 Cal Rptr.3d 502, in which the California Supreme Court provides some guidance on how the baseline conditions can and cannot be determined. To establish an environmental baseline, CEQA Guidelines § 15125 directs that the lead agency "normally" gauge baseline physical conditions "at the time the notice of preparation [of an EIR] is published, or if no notice of preparation is published, at the time environmental analysis is commenced." The Supreme Court clarified that it is improper to use the "permitted" values as baseline conditions, and that "actual" values must be used. Accordingly, the FSA used an improper baseline to analyze impacts of the proposed CECP project against the "permitted" water intake of the Encina plant.

Terramar does not believe that the impacts of the CECP should be evaluated by using the exiting Encina Power Plant under any circumstance, because the Encina facility was built long before CEQA was enacted, and the original decision to construct the facility, and to allow the biological impacts of seawater intake, was never subject to CEQA review. In addition, the conditions at Encina are subject to change. The Supreme Court stated that where conditions are changing quickly, the baseline might appropriately be the "predicted conditions," rather than the date at which environmental review began. Therefore, the FSA should have used the assumption of zero draw down, because the retirement of Encina is the "predicted" condition during operation.

When considering biological impacts and coastal resources, the fact that the Encina plant will shut down is a critical part of the analysis. As Mr. Faust stated on Feb. 1, 2010 on pages 186-188,

> *"When the Coastal Commission looks at projects or looks at plants, for that matter, it attempts to look not only at what the situation is right at the moment, but rather what for example, the length of development, or what can be expected or predicted over an extended period of time. To give you an example that's pertinent to the present situation, it appears to me, from hearing the staff testimony, that they have evaluated the impacts of this project based upon what they characterize as a CEQA analysis. Which is to say they're comparing the impacts of the project to the situation as it exists right at this moment on the site. The Coastal Commission wouldn't do that when it is doing a similar analysis. It would rather, for example, take into account that there's state policy that somewhere around 2017 or whenever appropriately it can be done, these existing facilities are going to cease to exist. And so presumably this is prime vacant coastal real estate upon which one can consider what the appropriate uses are. It's an unpainted palette, if you please. And there would be a process that the*

Coastal Commission would be a participant in, certainly local government would be perhaps the most significant participant, but it would be a community dialogue within the context of the preferences of the Coast Act as to what would occur on that site. But there would be no presumption whatsoever that the existing facility would be the only thing that would be looked at as a comparative purpose the situation would be over the period of time,"

The FSA must consider the predicted future condition of Encina shutdown.

b. VISUAL IMPACTS.

The addition of the proposed CECP will result in significant visual impacts. To determine whether there is a potentially significant visual resources impact generated by a project; Energy Commission staff reviews the project using the 2006 CEQA Guidelines Appendix G Environmental Checklist pertaining to "Aesthetics."

"The checklist questions include the following:
A. Would the project have a substantial adverse effect on a scenic vista?
B. Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?
C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Staff evaluates both the existing visible physical environmental setting, and the anticipated visual change introduced by the proposed project to the view, from representative, fixed vantage."(FSA p. 4.12-7.)

When reviewing visual impacts CEC staff failed to evaluate these questions based on an anticipated "no Encina plant" baseline. As indicated above, the retirement of Encina is a foreseeable event as a result of State Policy, and the FSA should have evaluated the visual impact of the CECP as if the Encina Plant does not exist. However, the viewshed analysis consistently assumed that the Encina Facility would remain in place when considering the view impacts of the CECP.

Overall visual dominance of the project would remain visually subordinate to the much larger and taller EPS structure. (FSA, p. 4.12-11.)

Although dominance is amplified by the skylining and form contrast previously described, which would draw viewers' attention to the project, the project would also be visually subordinate to the much larger and more prominent EPS within the same view. (FSA, p. 4.12-13.)

It would remain visually subordinate to the larger existing EPS facility within the same view, but would also compound the industrial character of this segment of the view, and increase the portion of the view with industrial character. (FSA, pp. 4.12-14 - 4.12-15.)

From this view angle, visual dominance of the CECP structures would be subordinate to the EPS stack and weak generally. (FSA p. 4.12-16.)

Project structures would remain subordinate to existing EPS features. (FSA, p. 4.12-20)

Thus, the entire visual analysis is flawed. To the extent that the FSA considered the future retirement of the Encina Plant, it failed to take into account the enhanced visual quality after shut-down and redevelopment. Although the FSA acknowledged that the Encina Plant would be decommissioned at some point in the future, the visual analysis failed to depict a redeveloped site and analyze the impacts of the CECP in the redeveloped site from multiple viewpoints. The visual simulations used to assess the future condition of the decommissioned Encina plant still show industrial facilities within the viewshed, and fail to depict the CECP within a redeveloped, visitor serving commercial site from multiple viewpoints. (See FSA, pp. 4.12-24 to 4.12-25.) Thus, no meaningful analysis was completed.

c. NOISE IMPACTS.

The FSA's cumulative noise analysis is inadequate for several reasons, as discussed below:

i. The FSA failed to consider the retirement of the Encina Facility in 2017.

The FSA omitted elimination of noise impacts from the shutdown of Encina units #1-5 as a foreseeable event. The decreased level in background noise from the 2017 shutdown of Encina, especially from the steam blows at Encina, was not modeled or assessed. The elimination of Encina background noise could impact the level of significance of the increased noise levels from the proposed CECP.

ii. The FSA failed to study noise impacts to the east, and failed to account for the amplification of noise to the northeast over the lagoon.

The FSA failed to study noise impacts to the east of CECP, focusing instead to the north and other areas. The CECP would be located adjacent to Aqua Hedionda Lagoon. The propagation and reflective pattern of sound waves can be quite different over water than it is over land. No noise analysis was conducted for residential areas to the east, where noise may be amplified as a result of the water within the lagoon. This is particularly important when it comes to the cumulative impact of the CECP and the existing and proposed freeway traffic noise. The FSA is inadequate for failing to study this issue.

iii. The FSA failed to consider cloud cover.

Per testimony February 4, CEC staff also failed to model the noise impacts from cloud cover that frequently occur surrounding the Encina site especially in the months of May and June.

> *"MS. BRIGHT: It's a possibility that cloud cover could impact the -- change the noise impacts. Like I said, inversion is a possibility with noise.*
> *MS. SIEKMANN: And was that taken into account in this -- in your report?*
> *MS. BRIGHT: We did not specifically study inversion, because it doesn't happen everywhere, or it's not a typical thing that happens all the tine. What I can suggest, if it's a major concern, is that we add a secondary operational survey to noise-4, taking place. One during, you know, a warm sunny day of the year, and another time when it's cloudy. And that should balance out the impacts."* (Feb 4 testimony, p. 254.)

The FSA is inadequate without including an analysis of cloud cover prior to CECP approval. Operational surveys after construction are not consistent with CEQA's requirement to identify and mitigate impacts prior to a decision.

iv. The FSA failed to include all reasonably foreseeable projects.

The FSA identified several other projects in the area of the CECP on page 4.6-13. However only one of those projects was considered in the cumulative noise impacts analysis: the construction of the Carlsbad Seawater Desalination Plant. The FSA did not analyze the cumulative impact of the widening of the I-5 freeway, apparently because there was not enough information:

> *The remaining projects have not progressed sufficiently to perform meaningful cumulative impacts analyses, but it is unlikely that any significant cumulative noise impacts would result.* (FSA p. 4.6-13.)

Claiming that there was not enough information to study the cumulative noise impacts from the CECP and the I-5 Freeway does not make sense, given the fact that CALTRANS sent plans to CEC Staff for review and met with CEC staff at the project site to address worker safety issues:

> *"Caltrans staff then sent me a set of cross-sectional views of the 8 plus 4 with barrier. Those cross sectional views showed the locations of their proposed westerly right-of-way line, their proposed retaining wall, the existing and proposed surface elevations of the I-5 widening along with existing surface elevations extending into the CECP site approximately."* (page 251,February 2, 2010 hearing, Bob Wojcik testimony.)
>
> *In order to confirm that Condition VIS-5 and related condition Worker Safety-7 would be adequate to fully address potential future I-5-related cumulative*

impacts, Energy Commission staff, with the assistance of Caltrans staff, conducted a June, 2009 on-site survey to measure the dimensions of the recommended buffer zone in relation to the I-5 widening alternatives currently analyzed in Caltrans' pending (unpublished) DEIS for that project. (p. 4.12-28.)

"We did go through an extraordinary effort to determine what would be the maximum encroachment of the I-5 widening on the project, for the most likely scenario that Caltrans engineers indicated that they would choose". (Testimony from Dr. Greenberg, Feb. 4, p. 35.)

What this demonstrates is that CEC Staff had sufficient information, including an unpublished DEIS, to understand that the I-5 widening project could include an 8 + 4 lane configuration with a retaining wall. Despite this information, no analysis was done regarding the potential for noise to be amplified, or to bounce off of any retaining wall or barrier in various directions. As indicated above, due to the nearby lagoon, and the different propagation and reflective patterns of water, the potential exists for the cumulative noise of the CECP and the I-5 widening project to be significant, particularly to the east, and the FSA's lack of analysis in this area renders the FSA inadequate.

The FSA incorrectly concluded that the cumulative noise impacts were not significant, while at the same time claiming it lacked information to "perform meaningful cumulative analysis". (FSA, p. 4.6-13.) A more conservative approach would have been to assume that the impacts are significant, given the alleged lack of information. Furthermore, regardless of whether the FSA conclusion about no information to perform meaningful analysis was correct at the time, it is a moot statement now that the CALTRANS EIR/EIS is available to the public. The cumulative noise impacts must be addressed before the CEC can consider the project.

v. The FSA failed to address the noise impacts from the proposed safety wall.

The FSA proposes a Condition of Certification to deal with concerns regarding the impact from removing the existing above grade ring road. Worker Safety Mitigation Measure 7 requires a barrier along the I-5 freeway with will protect worker safety and act as a visual barrier:

"Because protection of the nation's energy infrastructure as well as workers is of paramount importance, staff thus proposes Condition of Certification ***WORKER SAFETY-7****. This condition would require the project owner to place a barrier (****earth or other materials****) along the entire eastern property line shared by the CECP and Interstate-5 and that it be of sufficent strength and height so as to prevent a runaway car or semi-trailer truck from piercing the barrier and going over the edge and down into the power plant site. This barrier shall also serve to prevent line-of-sight viewing of the power plant site from the shoulder of I-5. In designing the barrier, the project owner will be required to consult with Caltrans and then submit a final plan to the Energy Commission Compliance Project Manager for review and approval. The project owner will be free to negotiate cost-sharing of this barrier with Caltrans and will be required to submit the cost-*

sharing contract with Caltrans to the CPM for review and approval. Staff believes that this barrier will serve the dual purpose of protecting safety and security. The loss of the existing above-grade "ring" road is offset by the required below-grade perimeter road for emergency response vehicles that will be built to code specifications as per ***WORKER SAFETY-6****."* (FSA, p. 4.14-15.)

"WORKER SAFETY-7 *The project owner shall place a barrier of* ***sufficient strength and height*** *at the eastern fence line of the project at the widened Interstate-5 Right of Way so as to prevent a runaway car or semi-trailer truck from piercing the barrier and going over the edge and down into the power plant site. This barrier shall also serve to prevent line-of-sight viewing of the power plant site from the shoulder of I-5. In designing this barrier, the project owner shall consult with Caltrans and then submit a final plan to the CPM for review and approval. The project owner may also negotiate cost-sharing of this barrier with Caltrans and if the project owner chooses to do so, the cost-sharing contract with Caltrans shall be submitted to the CPM for review and approval.*

Verification: *At least 60 days prior to the start of site mobilization, the project owner shall submit a copy of the final plans for the barrier and any cost-sharing contract to the CPM for review and approval*." (FSA, p. 4.14-21 to 4.14-22.)

If materials other than an earthen berm are used, the wall has the potential to reflect and amplify noise from the freeway, causing an increase in noise. This could also direct more noise to travel over the lagoon, where the propagation and reflective pattern of sound waves can change. CEQA requires that the impacts of mitigation measures be studied. (CEQA Guidelines § 15126.4.) At the very least, the CEC should modify the condition to ensure that the wall is designed so that it does not cause an increase in noise, especially for residential areas to the north and east adjacent to the lagoon.

d. PUBLIC SAFETY IMPACTS.

The proposed CECP's location, next to the I-5, in combination with the proposed I-5 widening project, will result in cumulative impacts in the areas of fire protection, worker and public safety due to the I-5's encroachment onto the EPS property. These incompatible projects will adversely impact public safety and the environment. The FSA's analysis of these impacts is incomplete and lacks cumulative impacts analyses and mitigation. CEQA requires evaluation of project compatibility to ensure that no adverse impacts to public safety and the environment exist.

"project reviews under CEQA are in place to evaluate the compatibility of projects that are not a permitted use or that have elements that may adversely impact public safety, the environment, or that could interfere with or unduly restrict existing and/or future permitted uses" (FSA p. 4.5-33.)

Expert testimony from Carlsbad Fire Marshall Weigand and Carlsbad Division Chief Heiser point out cumulative adverse impacts in fire protection and public safety created by the proposed CECP after the widening of the I-5 (a foreseeable project),

> *"MR. THOMPSON: I have one last request, and this is a bit unusual. I heard you, at one time, talk about what the most likely response event would be, starting with calls on the freeway. Would you repeat that for the benefit of the Commissioners?*
>
> *MR. WEIGAND: Certainly. You know, what we were talking about, what would really happen here in the case of a large fire. We're looking at the I-5 freeway, the major north/south artery through the State of California. The minute any plume of smoke comes up over that, cellphone calls, probably the first 50 calls will come from people on the I-5 freeway. The other thing that's going to happen at this point in time because of the proximity to the freeway, the freeway's going to lock up. We're going to get the people that decide to get off at Canon or Tamarack because they're going to go look and see. That's going to lock up our streets. As we work farther and farther, if we do end up with a significant fire here, the streets are going to become totally crammed with people, and some people leaving because of fear of what might potentially be happening, or be involved in the plant. You know, the general public doesn't necessarily involve or understand. All they see is a big industrial plant, and they see a hazard. And what that does to us is it makes our ability to respond with equipment, and I know Chief Heiser is going to talk about this more, our ability to respond with equipment in a timely manner, and be able to be effective at this facility, even worse than what's imagined. Just this proximity to that, the rail lines, the potential for a rail line hazmat incident. All those sorts of things that would impact our ability to deal with it." (Feb. 4,'10, pp. 65-66.)*
>
> *"MR. HEISER: It's our belief, based on past experience, of what impacts traffic on Interstate 5 that the proximity of the power plant, that as you described, any visual change, off-gassing, fire, smoke or any event that is visible to the Interstate 5 corridor, has significant potential based on past observations, of causing significant impact to the traffic flow in both directions. And the magnitude of that traffic flow would be predicated on the magnitude of the event." (Feb. 4, '10, pp. 125-126.)*

Division Chief Heiser continues to explain the cumulative negative impacts that would be created by placing the proposed CECP so close to the widened I-5 and adds testimony regarding the negative impacts that can also be caused by the CECP's incompatibility to the LOSSAN rail corridor which sits on the EPS site near the proposed CECP site.

> *MR. HEISER: When any fire department responds to an emergency event one of our obligations under the incident command system, and particularly for the incident commander, is to view not just the incident that's occurring, but its potential spread and impact. So one of the things that we generally do is try and control movement and limit that liability. So even if the event, itself, didn't shut*

Interstate 5 down, if anything that was coming from the power plant posed that potential, then as the IC I would request to the CHP the closure of Interstate 5. I'd also be looking at closing the rail line. And then also contacting the agencies who are responsible for the environmental event. But that applies to any event that impacts to that degree. Events at the airport, we routinely control avenues of egress and ingress out of the facility. We also control the air space over it at our request. Because the obligation for the incident commander is not just the management of the incident, but it's the welfare of the community around it." (Feb. 4, '10, pp. 127-128.)

Per these Carlsbad Fire Department expert witnesses, siting the proposed CECP between the I-5 widening and the LOSSAN rail corridor could create significant threats to public and worker safety due to the incompatibility of the projects.

Dr. Greenberg disagreed with the Carlsbad Fire Department's assessment of risk in the FSA on page 4.14-5,

"*while an impact to the fire department may indeed exist, the risk (chances) of that impact occurring and causing injury or death is less than significant."*

Dr. Greenberg continued with his "less than significant" risk assessment in his testimony.

"And so it was at that time that I determined that there was not a significant impact on the fire department, because there was not a significant chance that there could be that impact". (Feb. 4, '10, p. 44.)

Division Chief Heiser's risk assessment of the proposed CECP project differs greatly from Dr. Greenberg's.

*"So, when I see this power plant I recognize it's a change in technology. But it still represents a potential threat. So I look at what is the probability or possibility, and try and factor that in. And then simply say, I'm going to be the one that's responding. I'm the one that has the obligation when the event occurs to respond to that event and attempt to mitigate it or handle it. So I still see significant threat." (*Feb. 4, '10, p. 76.)

Three days after Dr. Greenberg stated in his testimony that the risk of a major event was less than significant; a major event occurred Feb. 7 at a power plant under construction in Middletown. Conn. Lives were lost, significant property damage occurred and the power plant was severely damaged as evidenced by Terramar's submission to the Energy Commission Docket Log 55710, February 25, 2010 "Terramar's Motion to Admit Supplemental Documents into the Evidentiary Records". Per evidence submitted by Terramar, the Connecticut Siting Council had also performed a thorough fire needs assessment, yet a significant event occurred causing loss of life and significant property damage.

Fire, Worker Safety and Public Safety are the priority of the Carlsbad Fire Department as presented in their oral and written testimony. Upon review of the Feb. 4 testimony pages 17-18 from the applicant's expert witness, Mr. Collins, is of the opinion that the Carlsbad Fire Department is a "*backup*". Mr. McKinsey summarized Mr. Collins testimony,

> *"So if I can summarize your testimony here, fire emergencies unlikely. They're considered in design. There's redundant safety fire protection features which essentially make fire suppression and control nearly automatic. And that municipal fire response is essentially a secondary and non-urgent response." (Feb. 4, p. 18.)*

Mr. Collins responds,

> *"That's absolutely correct."*

It was the fire department that responded to the Middletown, Conn. explosion and fire per articles submitted by Terramar Docket Log 55710, February 25, 2010 "Terramar's Motion to Admit Supplemental Documents into the Evidentiary Records."

Division Chief Heiser responded to Mr. Collins testimony,

> *"I've never, in my experience I've never been referred to, when responding to an emergency, as a backup entity. Our focus is life, environment and property, none of which are truly addressed adequately with a fire protection system. Fire protection systems hold or constrain an event, they don't prevent, necessarily mitigate the event, or provide the level of protection that a community or society expects. So when you think of an emergency, the primary response to an emergency that involves life safety, environment or property is the fire department. The safety systems they describe are an adjunct. They're a priority. They're extremely helpful in minimizing the event. But if they worked every time you wouldn't need us. And the reality is that they buy time to allow us to get into position. They don't make the bad things go away*." (Feb. 4, pp. 71-72.)

Increasing unmitigated negative impacts violates CEQA as stated in the FSA page 4.6-3,

> *"The California Environmental Quality Act (CEQA) requires that significant environmental impacts be identified and that such impacts be eliminated or mitigated to the extent feasible*."

The proposed Carlsbad Energy Center Project (CECP) fails to mitigate significant direct, indirect and cumulative negative impacts,

> *"to a point where clearly no significant effect on the environment would occur and there is no substantial evidence in light of the whole record" per California Environmental Quality Act (CEQA) 15064(f)(2).*

In addition, due to the unmitigated negative cumulative impacts on fire, worker and public safety created by incompatible land uses of the widened I-5 and the proposed CECP, a violation of CEQA would exist.

e. AIR QUALITY IMPACTS.

Power of Vision comments raised the concern of the cumulative emissions from the freeway impacting air quality and health impacts. (FSA, p. 4.-7-27.) Freeways are a source of diesel emissions, a known carcinogen. Staff responded by confirming that it had not evaluated the impacts of I-5 traffic emissions, "as they now exist because those emissions are included in the background risk to public health from all other sources." Staff did not study the cumulative impacts of the CECP project and the future I-5 widening. Under CEQA, a proper cumulative analysis must include past, present and probable future projects. (CEQA Guidelines § 15130). The existing freeway emissions are a past project, and the future freeway widening is a probable future project. As indicated above, CEC Staff had information regarding the I-5 Widening project, but refused to consider it. Because the existing freeway contributes emissions that affect health and air quality, and the power plant contributes emissions that effect health and air quality, the two projects create "related impacts" and must be considered on a cumulative basis. (CEQA Guideline § 15130.)

1B. THE PROJECT DESCRIPTION IN THE FSA IS INCOMPLETE AND INADEQUATE BECAUSE THE SHUTDOWN OF ENCINA UNITS 4 AND 5 SHOULD HAVE BEEN EVALUATED AS PART OF THE PROJECT.

The Project Description is incomplete because it fails to include the shutdown of Encina Units 4 and 5 as part of the project, instead claiming that Units 4 and 5 will continue indefinitely.

> *The EPS facility has been in operation since 1954. EPS Units 1, 2, and 3 (circa 1950 steam boilers that provided the initial electrical generation) would be permanently retired once the CECP is approved and operational. EPS Units 4 and 5, part of a subsequent EPS expansion that occurred in the late 1970s, would continue generating electricity regardless of this proceeding or its outcome. (FSA, page 3-1, also page 3-4)*

As indicated above, retirement of the entire Encina facility will occur by 2017, and Units 4 and 5 will *not* continue operation into the future. The FSA is therefore inaccurate. Given that the Encina facility will be shut down by 2017, the opportunity exists to convert the site from industrial uses to other uses, as envisioned by the City of Carlsbad. However, it is likely that the Applicant would not agree to the conversion of the site to non-industrial uses in 2017, and that the applicant really envisions constructing multiple power generation units on the site for the next 40 to 50 years. There is nothing to preclude the 65 acres from being redeveloped with new power generation units, rather than converted to non-industrial uses. The FSA states that the proposed CECP is part of the current Encina Power Station (EPS).

> *"The proposed project would not be considered a new project, because it would be located entirely within the existing EPS boundaries and includes*

decommissioning of older EPS units and replacement with newer technology in power generation." (FSA p. 4.5-17.)

Furthermore, the same reasons that staff has found that the site is the ideal location for energy development will still be applicable in the future, making it likely that the Applicant will want to add additional units. For example:

• Availability of infrastructure—the site should be within a reasonable distance of transmission, natural gas and water supply networks, as well as immediately accessible by roads capable of transporting large equipment and supplies; (FSA, p. 6-4.)
• Location that precludes significant noise, public health, and/or visual impacts to adjacent residential areas or sensitive receptors (such as day care centers, nursing homes, schools, and public recreation areas); (FSA, p. 6-4.)
• Compliance with local land use and zoning designations; (FSA, p. 6-4.)
• Site control—the site should be void of any site encumbrances (physical or administrative obstructions to long-term use of property) and should be available for sale or long-term lease (FSA, p. 6-4.)

The intended layout of the proposed units is no doubt strategically planned to accommodate additional power generation units on the site. (See Power of Vision Brief by Arnold Roe for a discussion of the site layout.) The likelihood is that there will be additional power generation units sited at this facility, and the cumulative impact of additional units should be addressed in the FSA. Using a simple acreage calculation, it appears that the 95 acre Encina site could support approximately 8 new generating units. If only 65 acres are used, which is the number given by NRG, then 6 more units could be developed. Unless there is a legal commitment to redevelop the site into something unrelated to power generation; the visual, noise and health risk assessments should address the maximum number of generation units that can be located on the EPS site. The applicant has piecemealed the project in violation of CEQA by chopping the entire replacement of the Encina facility into smaller projects.

Terramar believes that because the Encina Facility is targeted for retirement, the CECP should be considered a "new project" and not a replacement project. In addition, unless the applicant agrees that there will be no additional power generation units, the FSA should evaluate the impacts of replacement of Units 4 and 5 with additional new power generation units.

If the Applicant truly has no intention to replace Units 4-5 with new power generation units, then the entire shutdown of Encina should have been considered the baseline condition in order to evaluate project impacts. At the very least, the retirement of Units 4-5 should have been considered a reasonably foreseeable condition, and included in the cumulative analysis**.**

1C. HAS A REASONABLE RANGE OF PROJECT ALTERNATIVES BEEN EVALUATED?

Terramar joins in and incorporates by reference the City of Carlsbad's position on this topic.

PROJECT'S LORS COMPLIANCE
2A. THE CECP DOES NOT COMPLY WITH LORS

The neighborhood of Terramar joins in and supports the City of Carlsbad's and Power of Vision's opening briefs on this topic, Terramar also further states:

Unless the CEC supports the Carlsbad Fire Department's official position regarding the necessary widths of the upper "rim" road and the emergency access in the "pit" of the proposed CECP, the project is in conflict with the LORS of the California Fire Code. The widths of the emergency access width in the "pit" and the width of the upper "rim" road above the "pit" suggested by CEC staff are in direct conflict with the needs stated by the Carlsbad Fire Department.

Per Chief Weigand,

> *"The problem the pit provides for us is if something goes wrong, if I have to get my firefighters out of the situation that they're in, the vertical wall on the I-5 freeway, near-vertical wall on the I-5 freeway, which is going to have a soundwall or berm on the top of it, is impossible for my folks to get out*" (Feb. 4, '10, p. 56.)

Dr. Greenberg defended his position regarding the reduced road widths and sited several other power plants with limitations on pages 40-41 of his Feb. 4 testimony. Chief Heiser countered Dr. Greenberg's testimony by informing the Commission that the Encina site suffered from the accumulation of all the impacts that were noted by Dr. Greenberg in his examples. Per Chief Heiser,

> *"In addition I went and did – I recognize the limitation of this -- did a Google search of the other facilities that the Doctor referenced, and although I would agree with his statement that they all had some degree of confinement and/or challenges, what I still see in the Carlsbad site is taking all those comments and putting it in one place. So the Carlsbad site, as proposed, the bowl does provide an opportunity of having all of those issues in one spot. It does have significant environmental concerns to me, because that is one of my responsibilities. It does have a freeway next to it. It does have a rail line. It does have natural gas. I didn't see those same issues in totality in the other sites referenced. More importantly, I didn't see that referenced in the one site I visited on the ground."* (Feb. 4, '10, pp. 74-75.)

In his testimony Dr. Greenberg did acknowledge that it is up to the fire authority to decide their needs. Chief Kevin Crawford of the Carlsbad Fire Department stated in his written testimony on page Crawford-4 that "*a 50' minimum emergency access width at the base of the "pit" between any structures or facilities and the base of the pit sides*" was needed at a minimum. He also stated in his written testimony on page Crawford-4 that "*Provide a minimum*

25' emergency assess along the "rim" of the pit, and make recommended changes to the fire suppression system;" was also needed at a minimum.

Division Chief Heiser backed up Chief Crawford's testimony by explaining why the 50 foot emergency access was needed in the "pit", on pages 52-55 at the hearings Feb. 4, 2010. The record states,

> *"Mr. Hearing Officer, Commissioners, I'm the Operation Chief of the Carlsbad Fire Department. My view comes from the practical application of the codes and the design. So my bias lies with the fact that I view it not so much from a compliance issue, but simply how will I conduct fire-ground operations or rescue operation or EMS operation in regard to a response or demand. So looking at the roadway width is just an example. Our fire apparatus are relatively large. We have one truck in the city. It's 56 feet long. It's about ten feet wide and about 13 feet tall. That's its driving dimensions. In order to utilize it effectively on a fire ground or in rescue I need a little bit bigger footprint. So when you look at what the operational footprint is for that truck, it's approximately 20 feet wide and about 90 feet long. And that comes from the fact that a fire truck, for example, and the fire truck is the long one with the big ladder on it, really is just a giant toolbox. And as you go around it you're opening doors and taking out all the tools you need to do your job on the fire ground. So if you've got a vehicle that's approximately 10 to 11 feet wide, and then need a minimum of five feet on each side, you're starting to get this 20-foot width just to operate safely around it and access the equipment. Then in the example of the fire truck, the one that's again long, we have ladders that are stored underneath it that we need to access from the rear, so that 90 feet is just to gain effective access to both the front and the rear of the truck. …. I need about 90 feet if length to pull hose off the back end and effectively deploy it. I need access to the sides. So, when you start talking about how much room do I need to safely drive in and effectively operate, I start looking at what my initial footprint is. And then how much room do I have on each side. And if one side's a vertical wall, that limits options. If the other side I need a certain degree of standoff, an operating area that provides me with a degree of safety for the personnel that I've deployed down inside that area, I start looking at 20 feet isn't even close to what I would consider reasonable. And start looking at passing of additional apparatus, once I've placed apparatus. And at that point you start looking at 50 feet seems to be a reasonable width to safely conduct fire ground and rescue operations. One of my concerns is both the proactive and reactive approach, and I need the ability to safely deploy my resources and recover them. So I need width, length, height and 50 feet provides that." (Feb. 4, '10, pp. 52-55.)*

Chief Heiser's testimony is supported by Chief Crawford on pages 55-56 of the testimony of Mr. Crawford from Feb. 4, 2010 The record states,

> *"Well, the Fire Marshal and the Operations Chief have done a very succinct and thorough job of describing the importance of the access issues that we have with*

the access issues that are of concern to us. The only thing that I would add to that is that once we set up our operations and we begin our operations, we're anchored in there. We don't have the latitude or the luxury of being able to pick up and move. So if you visualize the operations as maybe you would with your personal vehicle, where if you're unloading your car and you decide you need to reposition for some reason, you can easily do it. You can lower the truck and get in your car and move. That just is not an option for us when we're establishing fireground operations. We take up a lot of space. We're 4 anchored in there. And we're going to be there for the duration of the incident. So that would be the only other thing that I would add to the record." (Feb. 4, '10, pp. 55-56.)

Chief Weigand testified regarding the dangers of a limited upper "rim" road,

"The problem that I see with this, if there's the berm and the trees and all that kind of stuff, is if, for some reason, we can't get down into the pit, the bowl, whatever you choose to call it, to fight the fire. And because of the way that the site is laid out, it's the long side of the facility for us, would have to be fought potentially with aerial streams off ladder trucks off the I-5 freeway, itself. And if you can contemplate what it would be like closing the I-5 freeway. Us having to lay multiple, large-diameter hose lines with relay pumping to get the water there, and shoot down and over it, if we couldn't get into it. And if there was a failure of the system. Or if we ended up with a mineral oil fire in the large transformers that are part of this system, which weren't particularly covered in hazardous materials. But there's certainly more than just the ammonia, if you use the California definition of a hazardous material. It potentially is going to provide a great obstruction to us and our ability to try and deal with what's happening in the bowl, if we cannot make entry." (Feb. 4, '10, pp. 64-65.)

Chief Crawford summed up the fire departments position,

"with what my colleagues have already recommended, and that is that a rim road up top of 25 feet, and an access road at the base of 50 feet, as well as consideration to the fire protection system, the onsite fire protection system, are of paramount concern to us." (Feb. 4, '10, p. 88.)

The Carlsbad Fire Department's official position is that they need 50 feet for the emergency access road and 25 feet for the "rim" road access. Per the California Fire Code, the Carlsbad fire authority would be the official authority to make these decisions.

In Dr. Greenberg's testimony he did admit,

"The California Fire Code, which is the controlling code in this matter, does indeed mention a 20-foot width. The fire chief and fire marshal correctly point out that the next paragraph gives the fire authority great latitude in determining whether they need to have a wider width." (Feb. 4, '10, p. 46.)

Therefore unless CEC supports the widths requested by the Carlsbad Fire Dept., they are in violation with LORS. The Carlsbad Fire Department's official position regarding the emergency assess road and the "rim" road access for the proposed CECP are:

50 feet for the emergency access road
25 feet for the "rim" road access

Per the California Fire Code, the Carlsbad fire authority would be the official authority to make these decisions as stated by CEC staff. Therefore the proposed CECP would not comply with LORS unless the CEC supports the emergency road widths requested by the Carlsbad Fire Department.

2B. THE CECP IS NOT "COASTAL DEPENDENT" AND DOES NOT COMPLY WITH THE COASTAL ACT.

The proposed CECP is an air cooled plant as stated in the FSA page 4.9-3. Based on the definition in the Coastal Act, an air cooled power plant is not coastally dependent because it does not need the sea in order to function:

> *"Coastal-dependent development or use means any development or use which requires a site on, or adjacent to, the sea to be able to function at all." (*Pub. Res. Code § 30101.)

While the proposed CECP needs to be located near a cheap, non-potable water source in order to obtain the water needed for its operation (other than cooling) there is no requirement that the water source for the proposed CECP be ocean water. The facility could function in a different location, as long as it had the appropriate source of water.

Mr. Faust, former Counsel for the Coastal Commission with 20 years of experience in working with the Coastal Act, testified that the CECP does not meet the definition of a Coastal-dependent use.[3]

> *"MR. THOMPSON: And I believe you testified that you do not believe that the CECP is coastal dependent, is that correct?*
> *MR. FAUST: Absolutely not". (*Testimony from Mr. Faust, Feb. 1, p. 186.)

Mr. Faust continued his expert opinion, indicating that power plants should not be sited in the coastal zone, if there is any other alternative location.

> *"There's one other point I think that I'd like to make with respect to the 1990 report, that I, at least, think is an important message, if you please, for the Commission. The Coastal Commission in 1990 looked at this proposal. And even though there was a general assumption at that time that it was a coastal-dependent facility, that it required ocean water in order to do cooling, even*

[3] Testimony from Mr. Faust (Feb. 1 page 184, *" I spent just over 20 years 12 as the Chief Counsel of the California Coastal Commission*.")

though that was the case, it said this site is not appropriate for this facility. I think that what that indicates is a general Coastal Commission philosophy, and I think it's embedded in the policies, which is that for a facility like this, if there's anywhere you can put it outside the coastal zone, you should put it there. This isn't what the coastal zone was designed for. The coastal zone was designed in terms of industrial facilities only for those which absolutely had to exist within the coastal zone. Which had to be on or adjacent to the sea in order to function at all. And that's a quote from Public Resources Code section 30101." (Testimony from Mr. Faust, Feb. 1, pp. 191-192.)

The FSA inappropriately concludes that the CECP is an expansion of Encina facility, rather than a "replacement" of units 1-3, and that by "expanding" the use of once through cooling water from Encina, the CECP is "expanding" a coastally dependent use.

"The proposed CECP would be a 558 MW gross combined-cycle generating facility located at the existing EPS, which is considered a coastal-dependent facility by the Coastal Commission. The existing EPS is a "coastal dependent use" pursuant to the Coastal Act, inasmuch as it uses once-through cooling technology. Coastal dependent uses are encouraged to expand "within existing sites and shall be permitted reasonable long-term growth where consistent with this division" (Public Resources Code, Section 30260). Even though the existing EPS steam boiler Units 1, 2, and 3 would be retired upon successful commercial operation of the new CECP generating units, the other existing EPS Units 4 and 5 would continue operating. Therefore, the EPS would continue to be a coastal dependent facility. Thus, the addition of the proposed project (i.e., CECP generating units 6 and 7) is an expansion of a coastal dependent use that is consistent with provisions of the Coastal Act. In addition, at this point, it appears that the most feasible source of water for the new CECP facility would be the proposed ocean water purification system, which would make the CECP a coastal-dependent use." The site is zoned Public Utility (allows for the generation and transmission of electrical energy) by the city of Carlsbad. The CECP would be located on the same property as the existing EPS power plant, and all of its associated infrastructure would be on-site at the existing EPS. The Coastal Act §30101 defines "Coastal-dependent development or use" as any development or use which requires a site on, or adjacent to, the sea to be able to function at all. While the CECP would not use ocean water for once-through cooling and on this basis may not be considered coastal dependent, locating the CECP at the site of the existing EPS (which is a coastal dependent use) and the proposed ocean-water purification system would make the project a coastal-dependent facility. . (FSA, page 4.5-12, emphasis added.)

Given the pending retirement of the entire Encina facility in 2017, the CECP should be considered a replacement project, not an expansion project. As a new, air cooled power plant, the CECP is not coastal dependent. Mr. Faust stated on Feb. 1, 2010 on pages 186-188,

"When the Coastal Commission looks at projects or looks at plants, for that matter, it attempts to look not only at what the situation is right at the moment, but rather what for example, the length of development, or what can be expected or predicted over an extended period of time. To give you an example that's pertinent to the present situation, it appears to me, from hearing the staff testimony, that they have evaluated the impacts of this project based upon what they characterize as a CEQA analysis. Which is to say they're comparing the impacts of the project to the situation as it exists right at this moment on the site. The Coastal Commission wouldn't do that when it is doing a similar analysis. It would rather, for example, take into account that there's state policy that somewhere around 2017 or whenever appropriately it can be done, these existing facilities are going to cease to exist. And so presumably this is prime vacant coastal real estate upon which one can consider what the appropriate uses are. It's an unpainted palette, if you please. And there would be a process that the Coastal Commission would be a participant in, certainly local government would be perhaps the most significant participant, but it would be a community dialogue within the context of the preferences of the Coast Act as to what would occur on that site. But there would be no presumption whatsoever that the existing facility would be the only thing that would be looked at as a comparative purpose the situation would be over the period of time," (Emphasis added)

It should be noted that the Applicant has done an "about face" on this issue of whether the project is coastally dependent. The Applicant stated in the Application for Certification project description that connecting to the once-through cooling system at Encina "should be avoided" and that the project is dry air cooled. This is a clear indication that the project was not considered a coastally dependent use by the Applicant. The Applicant's original intent was to avoid the negative impacts of impingement and entrainment, and avoid more waste water salinity. In fact, the Applicant claimed that the use of reclaimed water was a significant project benefit in the AFC, Project Objectives 1.2.1.

"Utilizing CCR Title 22 reclaimed water raw water source for the CECP. The use of reclaimed water by CECP represents a significant project benefit as use of potable water will be limited to sanitary uses and fire protection."

The CECP is not a coastally dependent use, and is therefore inconsistent with the policies of the Coastal Act which place priority on other land uses for private land within the coastal zone.

"The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry". Public Resources Code Section 30222 Private lands; priority of development purposes (emphasis added.)

The Coastal act does allow for the expansion of Coastal Dependent industrial facilities, but does not allow for the expansion of other types of industrial uses.

> *Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible*. (Pub. Res. Code § 30260 Location or expansion.)

Since the CECP is not a coastal dependent industrial use, it can only be located within the Coastal zone if the CEC makes the findings required within Section 30260 of the Coastal Act.

1) alternative locations are infeasible or more environmentally damaging;
2) to do otherwise would adversely affect the public welfare; and
3) adverse environmental effects are mitigated to the maximum extent feasible

These findings cannot be made because feasible alternatives exist, there would be an adverse impact to public welfare, and the construction of a desalination plant for the proposed CECP is inconsistent with the Coastal Commission's mandate to protect marine resources, and provisions to move away from the negative environmental impacts created by "once-through cooling."

> *"The Coastal Commission further noted that the CECP (as well as other power plants located in the coastal zone) is proposing to end the environmentally destructive use of seawater for once-through cooling and instead employ dry cooling technology, which the Coastal Commission has strongly supported during past power plant reviews. The move away from once-through cooling reduces the Coastal Commission's concerns about the type and scale of impacts associated with these proposed projects and about the ability of these projects to conform to Coastal Act provisions." (FSA p. 4.5-11.)*

CEC staff supported the Coastal Commissions provisions by stating on FSA page 4.2-1 that there would be no "once through ocean water cooling" from the project and further stated on FSA page 5.5-5,

> *"The new efficient gas-fired combined cycle Units will replace the aging once-through-cooling old Units (by seawater) in accordance with state policies prescribed by the Energy Commission."*

> "*Another critical component of the CECP generating units is that the project will be dry air cooled, thereby avoiding the need to connect to the existing Encina*

Power Station's sea water once-throughcooling system". (From the Application for Certification project description introduction 2.1)

Staff also compares the CECP to other projects, claiming that the CEC found several similar projects to be coastal dependent uses. However, a review of these projects finds that that the decision and facts are not comparable, as set forth in the table below:

Plant Referenced by CEC Staff	Rational in CEC Decision	Reason why CECP is not Comparable
El Segundo Power Plant Project	3. **Coastal Dependent Use:** Currently, cooling water for the existing facility is provided by two separate intake structures in Santa Monica Bay. The cooling water supply for the proposed project would use Outfall No. 001. Units 3 and 4 would continue to use the second, separate existing sea water intake (Outfall No. 002) to provide cooling water. Since the proposed project would be obtaining cooling water from the ocean, the project would remain consistent with the Coastal-dependent use definition. (El Segundo Decision, page 115)	The El Segundo project is directly using a sea water intake. CECP does not propose to use a separate intake structure, but rather proposed to take advantage of conveniently located seawater discharge.
Morro Bay Modernization and Replacement Power Plant Project	According to the Moss Landing Community Plan, industries located in Moss Landing are generally dependent on a location near the coastline for their existence. The plan states that these coastal-dependent industries, such as the existing Moss Landing Power Plant, are given priority by the California Coastal Act over other land uses on or near the coast. It is the intent of the Moss Landing Community Plan to encourage coastal-dependent industrial facilities to expand within existing sites, and to allow for the reasonable growth of these industries, consistent with the protection of the area's natural resources (Monterey County, 1982b, p. 62). Moss Landing, page 21	The local General Plan for Morro Bay found existing uses by the coast are coastal dependent. The local General Plan (City of Carlsbad) has not found that all uses by the Coast are coastal dependent.
Moss Landing Power Plant Project	Staff's own witness, on cross-examination, acknowledged that to be coastal dependent, a facility would have to be of a technology that must be located on or adjacent to the sea in order to function, and that a dry cooled facility does not meet that requirement. (RT 6/5/02 at p. 188-189.) The Staff witness also agreed that in this siting case, the Energy Commission, and not the Coastal Commission, would be the appropriate body to determine Project compliance with the Morro Bay zoning requirement. The witness acknowledged that this should be done by relying upon the plain meaning of the ordinance while placing great weight on the opinion of the City that would ordinarily enforce the ordinance. (RT 6/5/02 at pp. 189 -190.) By contrast, the Coastal Commission found that the Project would be an	The CEC was bound by a previous decision made in a Coastal Commission Section 30413(d) Report. The Coastal Commission found that the Moss Landing project was an expansion of an existing facility. There is no Section 30413 (d) Report for the CECP, and the CEC is not bound by the Coastal Commission Findings for Moss Landing. The CECP is not an expansion of an existing facility, but is instead a stand alone replacement facility that does not need to use ocean

Plant Referenced by CEC Staff	Rational in CEC Decision	Reason why CECP is not Comparable
	expansion of an existing coastal-dependent facility. Thus, the Coastal Commission would continue to define the Project as "coastal-dependent" regardless of whether the Project retains once through cooling or changes to dry cooling. In short, the Coastal Commission found that dry cooling would be an allowable use under the City's LCP. (Ex. 320) Notwithstanding the conflicting evidence in the record, we defer to the Coastal Commission's determination on this question. (Committee modified Morro Bay decision, page 18)	water. There is no evidence that the Coastal Commission found the CECP a reasonable expansion of an existing facility consistent with the Coastal Act, because there is no Coastal Commission Section 30413(d) Report in the Record. Furthermore, it is unlikely that the Coastal Commission would make such a finding because Encina is targeted for shutdown in 2017.
Humboldt Bay Repowering Project	In addition, Applicant's testimony states that the project qualifies as reasonable long-term growth of the existing facility because it is consistent with a 1978 Coastal Commission report that envisioned additional power generating equipment at the Humboldt Bay Power Plant. As shown in the 1978 report, the Coastal Commission anticipated reasonable expansion of the Humboldt Bay Power Plant in this location. (Ex. 1, p. 8.6-17.) Staff testimony agreed that the HBRP is consistent with Section 30260 of the Coastal Act. (Ex. 200, p. 4.5-7.) (Humbolt Decision, page 326) Although the HBRP would not use ocean water for once-through cooling, locating the HBRP at the site of the existing Humboldt Bay Power Plant, which is a coastal-dependent facility, allows the HBRP to utilize the plant's infrastructure, and thus avoid offsite construction of linear facilities or other infrastructure. Constructing the HBRP on this existing site would avoid the need to develop in areas of Humboldt County unaccustomed or unsuited to this type of industrial development. Furthermore, because the HBRP would discontinue the use of once-through-cooling now used at the existing HBPP, construction of the new project would have positive impacts on biological resources. (Humbolt Decision, page 325)	CEC did not find that the power plant was coastal dependent; the CEC found this particular plant was a "reasonable expansion" of an existing coastal dependent use. The CEC found that the Humbolt Plant met the three prong requirements of Coastal Act 30260 1) alternative locations are infeasible or more environmentally damaging; 2) to do otherwise would adversely affect the public welfare; and 3) adverse environmental effects are mitigated to the maximum extent feasible The CECP cannot be considered a reasonable expansion of a use that is targeted for shutdown in 2017, and the three prong test cannot be met, because there are feasible alternatives available, including the Pio Pico Energy

Plant Referenced by CEC Staff	Rational in CEC Decision	Reason why CECP is not Comparable
	In addition, the Coastal Act specifies with regard to location, "Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division (Division 20 – California Coastal Act). However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section … if 1) alternative locations are infeasible or more environmentally damaging; 2) to do otherwise would adversely affect the public welfare; and 3) adverse environmental effects are mitigated to the maximum extent feasible (Pub. Res. Code, § 30260). (Humbolt Decision, Appendix, page A-4)	Center (Docket 2010-AFC-01). there would be an adverse impact to public welfare, and the impacts of CECP have not been mitigated to the maximum extent feasible.

The shutdown of Encina will end a coastal dependent industrial use, and will truly eliminate the impacts to marine resources associated with seawater intake uses. These impacts are inconsistent with the Coastal Act Section 30231, and were not part of the original proposal.

> "*Another critical component of the CECP generating units is that the project will be dry air cooled, thereby avoiding the need to connect to the existing Encina Power Station's sea water once-through cooling system"*. (From the Application for Certification project description introduction 2.1.)

The fact that the project did not include seawater at one time makes it clear that it can be located independent of the ocean, and does not meet the definition of a coastal dependent use within the Coastal Act. A finding by the CEC that the project is a coastal dependent industrial use is not supported by substantial evidence.

2C. IS IT A UTILITY OR PUBLIC UTILITY AS THOSE TERMS ARE USED IN THE CITY'S REGULATIONS?

Terramar joins in and supports Power of Vision and the City of Carlsbad's position on this topic.

2D. IS A COMPREHENSIVE UPDATE OF CITY SPECIFIC PLAN 144 REQUIRED FOR CECP?

Terramar joins in and supports Power of Vision and the City of Carlsbad's position on this topic.

2E. IS A PRECISE DEVELOPMENT PLAN IN THE NATURE OF A SPECIFIC PLAN OR A PERMIT SIMILAR TO A CONDITIONAL USE PERMIT?

Terramar joins in and supports Power of Vision and the City of Carlsbad's position on this topic.

2F. DOES THE WARREN-ALQUIST ACT PREEMPT THE CITY REDEVELOPMENT AGENCY'S PERMITTING AUTHORITY?

Terramar joins in and supports the City of Carlsbad's position on this topic. Terramar has also touched on the issue of extraordinary public benefit in the Overrides discussion, below.

2G. DOES THE WARREN-ALQUIST ACT PREEMPT THE CITY'S APPROVAL AUTHORITY OVER THE STORMWATER POLLUTION PREVENTION PLAN?

Terramar joins in and supports the City of Carlsbad's position on this topic.

2H. DOES THE WARREN-ALQUIST ACT GIVE THE CALIFORNIA ENERGY COMMISSION THE AUTHORITY TO DECIDE WHETHER AND WHERE THE RAIL TRAIL CAN BE BUILT ON THE PROJECT SITE?

Terramar joins in and supports the City of Carlsbad's position on this topic.

2I. MUST THE COASTAL COMMISSION ISSUE A REPORT BEFORE THE COMMISSION CAN ACT ON THE PROJECT'S APPLICATION?

Terramar joins in and supports the City of Carlsbad's position on this topic.

2J. DOES THE RECENTLY ADOPTED CITY URGENCY ORDINANCE CS-070, PROHIBITING THE PROCESSING OF PERMIT APPLICATIONS FOR POWER PLANTS, HAVE ANY EFFECT ON THE COMMISSION'S PROCESSING OR CONSIDERATION OF THE CECP APPLICATION FOR CERTIFICATION (AFC)?

Terramar joins in and supports the City of Carlsbad's position on this topic.

2K. WHAT SPECIFIC CITY DEVELOPMENT STANDARDS (HEIGHT LIMITS, SETBACKS, FIRE EQUIPMENT ACCESS, ETC.) APPLY TO THE PROJECT AND DOES IT COMPLY WITH THOSE STANDARDS?

Terramar joins in and supports the City of Carlsbad's position on this topic.

2L. WHAT DEFERENCE, IF ANY, SHOULD BE GIVEN TO THE CITY'S INTERPRETATION AND APPLICATION OF ITS LORS (SEE, E.G., CAL. CODE REGS., TIT. 20, § 1744)?

Terramar joins in and supports the City of Carlsbad's position on this topic.

2M. WHAT RELEVANCE AND WEIGHT DO THE COMMISSION'S NOTICE OF INTENT PROCEEDINGS IN 1989 AND 1990 HAVE IN THIS PROCEEDING?

Terramar joins in and supports the City of Carlsbad's position on this topic.

GREENHOUSE GASES-
3A. DESCRIBE THE FINDINGS AND CONCLUSIONS YOU BELIEVE THE COMMISSION SHOULD MAKE REGARDING GREENHOUSE GAS EMISSIONS OF THE CECP.

Terramar defers to other Interveners to address this topic.

3B. SHOULD THE GREENHOUSE GAS EMISSIONS OF LNG BE INCLUDED IN THE ESTIMATION OF THE CECP'S POTENTIAL GHG EMISSIONS?

Terramar defers to other Interveners to address this topic**.**

OTHER ISSUES-
4A. WHAT IS THE RELEVANCE, IF ANY, OF THE STATUS OF ELECTRICITY PURCHASING CONTRACTS FOR CECP'S OUTPUT TO THE COMMISSION'S EVALUATION OF THE AFC?

Terramar joins in and supports the City of Carlsbad's position on this topic. In addition, Terramar has addressed this issue under Overrides, below.

CONDITIONS OF CERTIFICATION-
5A. DISCUSS THE CHANGES PROPOSED TO THE STAFF-RECOMMENDED CONDITIONS OF CERTIFICATION BY STAFF, THE APPLICANT OR ANY OTHER PARTY.

Terramar has addressed the inadequacies of the Conditions of Certification under each impact topic area, above.

OVERRIDES-
6A. OVERRIDES OF SIGNIFICANT ENVIRONMENTAL IMPACTS, AND INCONSISTENCY WITH STATE OR LOCAL LORS, OR BOTH, ARE REQUIRED IN ORDER TO APPROVE THE PROJECT.

a. THE CALIFORNIA ENERGY COMMISSION (CEC) MUST FIND THAT THE BENEFITS OUTWEIGH THE IMPACTS, AND THAT THE PROJECT IS REQUIRED FOR PUBLIC CONVENIENCE AND NECESSITY.

i. The required findings.

There are two types of "overrides" which may come into play in a power plant siting case.

The first addresses environmental impacts. Where a project will result in significant environmental impacts that cannot be mitigated, the CEC cannot approve that project unless it finds that "the benefits of the project outweighs the unavoidable significant adverse environmental effects." (20 Cal. Code of Regs. § 1755 (d)(2).) The cases involving this finding provide a great deal of discretion to the CEC. However, the CEC findings with regard to benefits must be supported by substantial evidence.

The second type of override addresses nonconformance of a project with state or local laws, ordinances, regulations, or standards (LORS). The Commission cannot license a project that conflicts with one or more LORS unless it finds "that such facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving such public convenience and necessity." (Pub. Res. Code, § 25525.)[4] This determination must be made based on the totality of the evidence of record and consider environmental impacts, consumer benefits, and electric system reliability.

In recent cases where the CEC exercised its power to override based on LORS incompatibility, the CEC included a finding that the facility was needed for local power generation. These cases are Geysers (1981), Metcalf (2001), and Los Esteros (2006). Thus the CEC has considered whether the new facility will provide power to the local community as one factor when determining public convenience and necessity.

In the case of the CECP, there are significant unmitigated impacts, and conflicts with the laws, ordinances, rules and standards of the City of Carlsbad. Accordingly, the CEC is obligated to make the following findings:

1. That the "benefits of the project outweigh the unavoidable significant adverse environmental effects"
2. That the project is "required for public convenience and necessity and that there are no more prudent and feasible means of achieving such public convenience and necessity."

[4] 25525. The commission may not certify a facility contained in the application when it finds, pursuant to subdivision (d) of Section 25523, that the facility does not conform with any applicable state, local, or regional standards, ordinances, or laws, unless the commission determines that the facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving public convenience and necessity. In making the determination, the commission shall consider the entire record of the proceeding, including, but not limited to, the impacts of the facility on the environment, consumer benefits, and electric system reliability. The commission may not make a finding in conflict with applicable federal law or regulation. The basis for these findings shall be reduced to writing and submitted as part of the record pursuant to Section 25523.

As set forth below, the CEC cannot make the required findings because there is no substantial evidence to support a finding that the benefits outweigh the significant impacts. Furthermore, because the power plant will not supply power to the local community, there is not support for a finding that the plant is required for public convenience and necessity.

In addition, under the Carlsbad Redevelopment Plan, the project must provide an "extraordinary public benefit". Terramar incorporates by reference the arguments of the City of Carlsbad regarding the applicability of the Redevelopment Plan to the CECP project.

As discussed above, the proposed CECP will result in significant, unmitigated direct, indirect and cumulative impacts. Terramar believes that multiple overrides would be needed regarding unmitigated impacts of air quality, biology, visual, noise, public safety, fire safety, as outlined above, and that the benefits, as noted in the FSA do not outweigh the impacts.

Terramar also believes that multiple overrides would be needed regarding the conflicts with the LORS which requires the CEC to find that the facility is required for public convenience and necessity and that there is no more prudent and feasible means of achieving public convenience and necessity. Terramar does not believe that the record supports a finding of public convenience and necessity, and that there are more prudent and feasible ways to meet necessity, if it exists and all.

ii. The 5 public benefits identified in the Final Staff Assessment are without merit.

The Final Staff Assessment identifies what it calls "Noteworthy Public Benefits (FSA, pp. 1-7) as follows:

1. *"Facilitating the retirement of the aging and inefficient EPS Units 1 through 3"*
2. *"utilizing existing EPS infrastructure to reduce environmental impacts and costs"*
3. *"eliminating the daily need for millions of gallons of once-through ocean water cooling, and its associated fish impingement and biological impacts (entrainment):"*
4. *" meeting the need for new, more efficient, reliable electrical generating resources located in a critical load center of the San Diego region by modernizing existing aging electrical generation infrastructure in north coastal San Diego County;"*
5. *"accomplishing a brownfield (land that has already been developed as an industrial use) redevelopment of an existing power plant for a net increase in electrical generation capacity."*

Terramar sets forth the reasons below why each and every one of the alleged public benefits of the project are illusory, are not supported by the facts, and cannot be used as a justification to approve the CECP.

1. ALLEGED BENEFIT NUMBER 1

"Facilitating the retirement of the aging and inefficient EPS Units 1 through 3" (FSA, Executive Summary, 1-7)

NOTEWORTHY PUBLIC BENEFITS

The Encina Power Station has an NPDES permit from the San Diego Regional Water Quality Control Board. …The proposed project would implement dry-cooling technology, and therefore would not need to connect to the existing Encina Power Station seawater once-through cooling system for this purpose.

Further, the CECP would facilitate the retirement of existing Encina Power Station Units 1, 2, and 3. …Retirement of Units 1, 2, and 3 could reduce the amount of seawater used in once-through cooling by approximately 225 million gallons per day (CECP 2007a). The reduction in intake volume and the resulting reduction in impingement and entrainment of aquatic organisms from Agua Hedionda Lagoon, as well as the reduction in thermal pollution from discharge water into the Pacific Ocean, is a noteworthy environmental public benefit(FSA 4.2-18)

Since units 1 through 3 hardly run at all, the FSA overstates the benefit of facilitating the retirement of units 1 through 3. For the very reason that the units are inefficient and expensive to operate, the operation of EPS Units 1 through 3 has significantly diminished. In fact, the entire Encina facility only ran about 7% of the time in 2009 per Mr. Vidaver in his Feb. 3, '10 testimony, pages 414- 415. Units 1 through 3 operate as peaking units. (San Diego Air Pollution Control District's Final Document of Compliance, p. 20.)

More importantly, however, the CECP is not necessary to retire Units 1 through 3 of the Encina facility, because the entire Encina Facility will be retired in 2017. Units 1-3 would be retired even if this plant is not built because Encina is slated for shutdown by 2017. Therefore,

"Facilitating the retirement of the aging and inefficient EPS Units 1 through 3"

will not provide any extraordinary public benefit.

The FSA incorrectly claims that the "Retirement of Units 1, 2, and 3 could reduce the amount of seawater used in once-through cooling by approximately 225 million". Given that Encina only operates about 7% of the time, and that units 1 through 3 only operate as peaker units, Staff has overstated the alleged benefit. Staff recognized this inaccuracy, and tried to correct it in a Memo dated May 27, 2010. Based on this memo, the FSA should be corrected to indicate that "Retirement of Units 1, 2, and 3 could reduce the amount of seawater used in once through cooling by approximately 23.5 million gallons a day. The FSA therefore overstated the alleged public benefit by about 200 million gallons a day! Further, as indicated above, CEC Staff failed to take into account the impacts over time.

2. ALLEGED BENEFIT NUMBER 2

"utilizing existing EPS infrastructure to reduce environmental impacts and costs"

This benefit is without merit. The fact that this facility can use existing infrastructure must be balanced against the fact that the infrastructure represents industrial uses in the Coastal

zone, and that rather than ceasing an opportunity to retire those infrastructure uses along with retirement of the Encina facility, this project will perpetuate the uses. If existing infrastructure were the only consideration, then there would never be a reason to build a power plant in an entirely new area. Instead of "utilizing existing EPS infrastructure to reduce environmental impacts and costs" the proposed CECP will perpetuate environmental impacts and costs after the eventual shut down of units 1-5 causing an increase of impacts that would have otherwise ended with the shutdown and elimination of the Encina Power Station on the coastline.

3. ALLEGED BENEFIT NUMBER 3

"eliminating the daily need for millions of gallons of once-through ocean water cooling, and its associated fish impingement and biological impacts (entrainment):"

This benefit is without merit. The project will not eliminate impingement and entrainment impacts. Instead of these impacts occurring as a result of once through cooling, the impacts will occur as a result of the CECP operational need for water. The FSA incorrectly assumes that changing the purpose for water intake has somehow eliminated the impact.

> *The proposed project would implement dry-cooling technology, and therefore would not need to connect to the existing Encina Power Station seawater once-through cooling system for this purpose.* (FSA pp. 4.2-18, emphasis added.)

> *"Alternatively, a proposed desalination system would utilize EPS' existing, permitted ocean water intake and discharge facilities." (FSA, p. 1-2.)*

The FSA is misleading because in order to use the Encina discharge facilities, the Encina facility must continue to operate the intake structure. Common sense tells us that changing the purpose for water intake will not eliminate the impact.

Furthermore, as indicated above, over the long term the impacts from the CECP will be greater than from the Encina facility, because the Encina facility is hardly used at all, and because the Encina facility will retire within a few years of operation of the CECP. Although the daily amount needed for the CECP is less, the CECP will continue these impacts for at least 40 more years, which will actually result in greater impacts. After Encina is retired, water volume used by the proposed CECP would offset Encina shutdown benefits. The retirement of Encina, units 1 through 5 in 2017 can achieve the alleged third benefit of eliminating the need for millions of gallons of water, without the necessity of the CECP.

Therefore instead of "*eliminating the daily need for millions of gallons of once-through ocean water cooling, and its associated fish impingement and biological impacts (entrainment):"* the proposed CECP would continue cumulative environmental impacts of impingement and entrainment.

In addition it needs to be pointed out that the FSA incorrectly states on page 4.2-18 that there will be a "noteworthy public benefit" from the proposed CECP because it would not need to connect to the Encina seawater once-through cooling system. Per the testimony from the

hearings it is well known that the CECP is proposed to connect to the existing Encina Power Station seawater once-through cooling system. The FSA has incorrectly stated that the proposed CECP would not need to connect to the existing Encina Power Station seawater once-through cooling system, creating confusion for the public regarding the public benefits, or lack thereof, of the project. Therefore, alleged benefit number 3 does not exist.

4. ALLEGED BENEFIT NUMBER 4

"meeting the need for new, more efficient, reliable electrical generating resources located in a critical load center of the San Diego region by modernizing existing aging electrical generation infrastructure in north coastal San Diego County;"

Again, this benefit is without merit. Mr. McIntosh, Director at CAISO points out that it is the utilities that decide what projects receive contracts "*to meet the needs*" in his testimony on Feb. 3, page 213,

"We determine the need, that's correct, and the utilities contract for the power."

On page 258 of the February 3 hearings, Mr. Layton, manager of the engineering office of the CEC, confirms Mr. McIntosh's testimony,

"Again, if they are needed, they will get a power purchase agreement and they will operate. If they are not needed, they may not get a power purchase agreement and they will not operate."

Yet when Mr. McKinsey was asked whether NRG had a contract for the proposed CECP or was "short listed" by SDG&E Mr. McKinsey stated on February 3, page 358,

"NRG has indicated very clearly that they cannot discuss the status of the contract negotiations, even any status they have at any RFO proceeding for two reasons; one, it's company policy, and two, because they have confidentiality obligations in those proceedings."

Due to the confidentiality that Mr. McKinsey referred to in his statement, Terramar suggested that Mr. McKinsey could present any "short list" or contract information regarding the proposed CECP to the Commissioners confidentially, per testimony February 3, page 358,

"MS. SIEKMANN: Not even just with the Commissioners?
MR. McKINSEY: No. "

Again Mr. McKinsey stated on page 358,

"NRG cannot and will not comment on the status of any RFO participation or contract negotiation both as a matter of policy and because of confidential obligations they have in those processes."

The claim of confidentiality makes no sense, because in other proceedings, the fact that there are contract negotiations is not confidential. For example, there is an application on the CEC website for a proposed power plant in San Diego County called: Pio Pico Energy Center Power Plant Licensing Case (Docket Number: 2010-AFC-01; Application For Certification) In the General Description of the project it states:

> *Pio Pico Energy Center LLC is currently negotiating a power purchase agreement (PPA) with San Diego Gas & Electric (SDG&E). The PPEC is designed to directly satisfy the San Diego area demand for peaking and load-shaping generation, near and long term. The project would have a maximum annual capacity factor of approximately 46 percent (4,000 hours per year).*

Clearly, the Applicant is not disclosing anything about contract negotiations because there are no contract negotiations.

The Applicant has not provided any indication that they have or are negotiating a contract for electrical generation for the San Diego basin from San Diego Gas and Electric, the local utility provider. Without a contract with SDG&E, a key purpose of the project is not fulfilled:

> *In general, the applicant's objectives are to design, build, own, and operate the Carlsbad Energy Center Project (CECP) to meet the need for additional electric generation capacity and ancillary services in the Southern California region. Specifically, the CECP is designed to provide flexible, quick-start peaking capacity in the northern San Diego County service territory of San Diego Gas and Electric (SDG&E). (FSA, p. 3-3.)*

If the Applicant is refusing to provide or disclose anything about contract negotiations, then there is no substantial evidence in the Record to support a CEC decision. The CEC cannot find that the CECP is "meeting the need for new, more efficient reliable electrical generating resources." Furthermore, without the need for the energy, the CEC has no reason to approve the project:

> ***"Title 20, Chapter 5, Article 3,§ 1741. Application Proceeding; Purpose and Objectives.***
>
> *The purpose of an application proceeding is to ensure that any sites and related facilities certified provide a reliable supply of electrical energy at a level consistent with the need for such energy,"*

The second section of the quote regarding the fourth benefit is:

> *"located in a critical load center of the San Diego region"*

Per testimony Feb. 3, page 325 CEC staff, Mr. Vidaver stated,

> *"The ability to provide dispatchable or dependable capacity in the San Diego local reliability area, and thereby retiring the existing units at Encina can be*

accomplished, as far as I know, by any replacement capacity located anywhere in the San Diego area. So to say that the Carlsbad energy project is critical is setting -- at the very least it's setting a standard that's not possible to meet."

The above statement from Mr. Vidaver refutes that the proposed CECP is, "*located in a critical load center of the San Diego region"*.

The last section of the fourth stated public benefit is:

"by modernizing existing aging electrical generation infrastructure in north coastal San Diego County"

As stated by Mr. Vidaver in the previous paragraph, the modernization of the aging infrastructure can occur anywhere in the San Diego region. City of Carlsbad expert witness, Mr. Garuba stated on page 451at the hearings on February 3,

"I think the city would fundamentally disagree. That aging infrastructure, while useful and cost effective, is not a reason to promote the kind of coastal land use that the CECP would continue. Again, I would turn my eyes towards the Chula Vista decision by the Commission. We felt that there was language in there that addressed this issue."

And as stated by Mr. Sharman on pages 200-201, during the hearings on February 3, 2010,

"I think in the next few years there's going to be some dramatic changes in the energy generation landscape adding to dispatchability of renewables. And dispatchability of renewables is a very exciting process. And I view this plant much like, or this application much like when I was young and the mainframers said, no, you've got to put a mainframe in that little office of yours, and then the mini guys and then the PC guys were actually coming in and showing how it could be done without a mainframe. And so thermal storage, hydrogen cells, fly wheels, very advanced battery technology is coming online to provide dispatchability. And so that dispatchability with zero emissions is, I think, a very, very important consideration that the CEC is looking at and will look at and continues to look at, and should be quantified in this framework that Tam was discussing needed to be done, when, where, and how much."

Negative financial impacts can be created for ratepayers by building an enormously expensive new power station that could be obsolete before it reaches half life. Mr. Hunt testified at the hearings on February 3, 2010 page 183,

"And right now, we're not looking at cost in this proceeding at all because these plants, when they're approved, do incur costs to rate payers no matter what happens. If they're built, they have a contract, those contracts incur costs. If

plants are built needlessly willy-nilly without any quantitative analysis, then you have potential dramatic increases in costs for rate payers."

Therefore the alleged benefit number 4 does not exist.

5. ALLEGED BENEFIT NUMBER 5

"accomplishing a brownfield (land that has already been developed as an industrial use) redevelopment of an existing power plant for a net increase in electrical generation capacity."

The fifth and final stated public benefit is without merit. The CEC is not in the business of deciding what is and is not appropriate brownfield development or redevelopment. The CEC must defer to the City with regard to land use and redevelopment issues, and the City General Plan has directed industrial uses to a select area within the City along the "airport industrial corridor" of Palomar Airport Road.

"[T]he model model upon which the Land Use Plan of this General Plan is based, is one of a centralized employment core (the airport/industrial corridor) supporting and supported by several adjoining residential communities, each of which is, and will continue to be, relatively self-contained, developing with its own special identity and character." (General Plan, p. 3.)

The City has identified the Encina site for redevelopment as commercial and visitor serving uses, not as a power plant. Per the Letter to Mike Monasmith from Mr. Garuba of the City of Carlsbad docketed, "City of Carlsbad Letter Regarding Land Use Information - Dated May 1, 2008. Posted October 8, 2008. (PDF file, 32 pages, 1.6 megabytes" On page 1 the letter states:

"The EPS property is predominantly surrounded by residences and open space. Its central location and proximity to the beach and lagoon, significant open space, and major transportation corridors make it a potential key gateway location and a connector between the ocean and existing and future visitor-serving and recreational uses. Accordingly, the City believes that a coordinated and appropriate planning effort for the entire property, as well as removal of the existing power plant and re-designation of the EPS for publicly-oriented, non-utility land uses, are necessary steps towards fulfilling this area's community benefit potential and the City's desired Vision for the CECP area."

On page 14 of the same letter it states:

VII. South Carlsbad Coastal Redevelopment Project Area Plan

Background/Intent

In September, 1997, the City of Carlsbad began to identify options for an action to eliminate or reduce the environmental impacts of the existing Encina Power Plant and to achieve more compatible land uses along its coastline. The existing power plant, which began operation in 1954, was obsolete due to its outdated, inefficient technology and more stringent Air Pollution Control District air emission standards, which were acknowledged by both the power plant owner/operator and the City, as well as other regulating agencies. In addition, the industrial land use represented by the power plant and related facilities was no longer considered the best use for this beautiful coastal property.

The head of the Redevelopment Agency, Ms. Fountain, testified regarding the intended uses for the Encina site:

> *In our own Agency assessment of the development alternatives, conservative estimates indicate that the revenue generated for local government would be substantially higher for commercial development with visitor-serving uses (such as a hotel and/or restaurants) vs. the development of one or more power plants on the site. The revenue generating potentially is significantly different, with commercial development exceeding power plant development by nearly 5 times as much revenue on an annual basis."(Page FOUNTAIN-13 from the Testimony from the City of Carlsbad and Carlsbad Housing & Redevelopment Agency)*

The City of Carlsbad is the appropriate entity to determine how the Encina site should be redeveloped, and findings regarding extraordinary public benefit are necessary. Terramar joins in the City of Carlsbad's opening brief regarding the necessary findings.

The Encina site can offer extraordinary public benefit if redeveloped into appropriate coastal uses. The Encina site is a rare piece of prime coastal property. Carlsbad is coastal town and has a well developed tourism industry. An extensive list of tourism properties were presented in the hearings as having been built over the past fifteen years. The City of Carlsbad testified to the fact that the coastal tourism industry exists as a substantial industry in the city. Website information was presented supporting the existing tourism industry. Visitor serving commercial is also a high priority land use under the Coastal Act. (Pub. Res. Code § 30222.) Also in Attachment 1 of Ms. Fountain's written testimony on page 2 she states how visitor serving commercial and recreational uses envisioned for the site would be of more benefit to the public than the proposed CECP:

> ***"ATTACHMENT 1***
> ***COMPARISON OF PROJECT SCOPE AND EXTRAORDINARY PUBLIC BENEFITS DESALINATION PLANT (TO BE CONSTRUCTED BY POSEIDON) and PROPOSED CECP***
>
> *The CECP represents additional tax related income for the Agency and the City. Initial financial studies indicate that the economic benefit of a new power plant*

without assurances that the existing power plant will be demolished is much less than can be obtained with visitor□serving commercial and recreational uses envisioned for the site. The CECP creates minimal long□term jobs, generates no sales tax or transient occupancy tax revenue for the City and provides for no public amenities which would add value to the property from a community use perspective"

Under the Coastal Act, the fact that the Encina site exists would not be relevant.

"When the Coastal Commission looks at projects or looks at plants, for that matter, it attempts to look not only at what the situation is right at the moment, but rather what for example, the length of development, or what can be expected or predicted over an extended period of time…. And so presumably this is prime vacant coastal real estate upon which one can consider what the appropriate uses are. It's an unpainted palette, if you please… But there would be no presumption whatsoever that the existing facility would be the only thing that would be looked at as a comparative purpose the situation would be over the period of time," (Mr. Faust Testimony, February 1, 2010 on pp. 186-188.)

"Again, unlike staff, from a Coastal Commission perspective, we look at those impacts in terms of a comparison to what will be, not just what is at this moment. And certainly, what will be includes the fact that the existing facility, at least according to what I understand to be state policy, is going to disappear sometime plus or minus 2017." (Mr. Faust's Testimony, February 1, 2010 p. 190.)

Redevelopment of the Encina site as commercial and visitor serving uses would bring extraordinary public benefit to all in the way of coastal uses such as restaurants, hotels, shopping, walking paths, coastal access. It would bring financial benefit to the City, especially during these difficult economic times. That is of public benefit to the citizens of Carlsbad. There is evidence in the record that a power plant could impact tourism. Vast amounts of testimony were provided by residents February 1 and February 2 of the hearings supporting the fact that Carlsbad is a tourist community. The City of Carlsbad testified to the fact that the future of local tourism industry would be negatively impacted by the proposed CECP. Testimony provided by a Carlsbad developer, Bill Canepa, on page 274 discussed the intrusive placement of the proposed CECP by stating,

"But you wouldn't put it at the entry to the resort. You'd put it someplace where it wouldn't be as intrusive."

Mr. Canepa's testimony continued on page 275 of the February 1, 2010,

"And I think common sense would tell somebody that a power plant is not really the way you want to greet visitors."

Instead of providing an extraordinary public benefit, building the proposed CECP saddles the public with a new fossil fuel burning plant in the coastal zone for at least another 30 years.

Thirty years is the stated approximate life span as noted by Mr. Monasmith in his testimony February 1, page 42, though the Encina Plant has had a life span fifty plus years. As a continued industrial use, the proposed CECP would not provide the benefit of any long term employment per CEC staff at the hearings.

> *"MS. SIEKMANN: But there would be no new long-term employment, is that correct?*
> *MR. MONASMITH: My understanding is that's right."*
> (February 1, p. 35.)

CEC staff also noted long term employment would not occur on page 4.8-6 of the FSA. Yet staff incorrectly listed long term employment as an additional public benefit in the FSA on page 1-7,

> *"Staff has identified additional noteworthy socioeconomics public benefits that would include both short term construction-related and long term operational-related increases in local expenditures and payrolls, as well as sales tax revenues."*

Therefore, alleged Benefit Number 4 does not exist. The CEC cannot find that the CECP will be redeveloped such that it provides an extraordinary public benefit.

6B. DISCUSS WHETHER THE COMMISSION SHOULD ADOPT OVERRIDES AND IF SO, ON WHAT GROUNDS, CITING SPECIFIC FACTS AND CONCLUSIONS JUSTIFYING AN OVERRIDE.

The Commission would not be able to adopt overrides due to the fact that as shown in above. The proposed CECP does not pass the tests of:

> *"the benefits of the project outweighs the unavoidable significant adverse environmental effects." (20 Cal. Code of Regs. § 1755 (d)(2).)*

> *"that such facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving such public convenience and necessity." (Pub. Res. Code § 25525.)*

Certification of the Carlsbad Energy Center Project would violate CEQA and LORS, and there is not substantial evidence to support any CEC overrides.

CONCLUSION.

It is the responsibility of the Applicant to mitigate cumulative negative impacts per CEQA law. As stated before the Applicant must bear the burden of proof to show mitigation of cumulative negative impacts "to a point where clearly no significant effect on the environment would occur and there is no substantial evidence in light of the whole record." (CEQA § 15064(f)(2).)

Mitigation *"to a point where clearly no significant effect on the environment would occur and there is no substantial evidence in light of the whole record"* has not been proven in the areas of:

a. **Impingement and Entrainment Impacts**
b. **Inconstancy with the Coastal Act**
c. **Visual Impacts**
d. **Noise Impacts**
e. **Public Safety Impacts**

and the cumulative negative impacts in all the areas listed would increase, which is a violation of CEQA. From the FSA page 4.6-3, "The California Environmental Quality Act (CEQA) requires that significant environmental impacts be identified and that such impacts be eliminated or mitigated to the extent feasible."

The Commission cannot make the findings necessary to override significant impacts, as Commission staff has not performed a complete evaluation as evidenced in the body of this brief, in addition mitigation measures offered will not avoid or lessen impacts, and the Project's benefits do not outweigh its environmental consequences.

The Applicant is required to bear burden of proof for extraordinary public benefit per California Code Title 20, Chapter 5, Article 3, **§ 1748. Hearings; Purposes; Burden of Proof.** (d)

> *"Except where otherwise provided by law, the applicant shall have the burden of presenting sufficient substantial evidence to support the findings and conclusions required for certification of the site and related facility."*

In the Final Staff Assessment (FSA) pages 1-7of the Executive Summary Noteworthy Public Benefits are listed as:

> *"• facilitating the retirement of existing EPS Units 1 through 3;*
> *• utilizing existing EPS infrastructure to reduce environmental impacts and costs;*
> *• eliminating the daily need for millions of gallons of once-through ocean water cooling, and its associated fish impingement and biological impacts entrainment);*
> *• meeting the need for new, more efficient, reliable electrical generating resources located in a critical load center of the San Diego region by modernizing existing aging electrical generation infrastructure in north coastal San Diego County; and,*
> *• accomplishing a brownfield (land that has already been developed as an industrial use) redevelopment of an existing power plant for a net increase in electrical generation capacity*

It is the Applicant's responsibility to provide extraordinary benefit as part of the proposed Carlsbad Energy Center Project (CECP) Application for Certification (07-AFC-6) and to

mitigate cumulative negative impacts. The Applicant also has the burden of proof to show they are mitigating the negative impacts,

> *"to a point where clearly no significant effect on the environment would occur and there is no substantial evidence in light of the whole record."*

It has been shown in this document that these five stated benefits fail to prove extraordinary Public benefit and fail to significantly mitigate negative impacts and cumulative negative impacts, per CEQA § 15064 (d)(3),

> "*to a point where clearly no significant effect on the environment would occur and there is no substantial evidence in light of the whole record."*

per CEQA § 15064 (f)(2). In fact the mitigation measures proposed in the FSA are insufficient to reduce impacts created by the proposed CECP to a less-than-significant level as also evidenced in the body of this brief. Increasing negative impacts violates CEQA stated in the FSA page 4.6-3,

> *"The California Environmental Quality Act (CEQA) requires that significant environmental impacts be identified and that such impacts be eliminated or mitigated to the extent feasible."*

Further, the Applicant has the responsibility to provide "*extraordinary public benefit"* as part of the proposed CECP project per the FSA page 1.9 of the Executive Summary it states,

> *"Moreover, staff acknowledges local land use LORS and critical threshold levels (the city of Carlsbad applies an "extraordinary public benefit" test to any land use development in determining appropriateness)."*

The proposed CECP does not pass the test of extraordinary public benefit, therefore Certification of the Carlsbad Energy Center Project would violate CEQA and LORS as:

The Project Will Cause Significant Environmental Impacts That Have Not Been Adequately Mitigated.

The Project Will Create Significant Fire, Worker Safety and Public Safety Issues.

The Project Will Not Create Significant Extraordinary Public Benefit.

The project violates local laws and ordinances, as well as public safety regulations.

Submitted August 17, 2010
By Terramar
Kerry Siekmann & Catherine Miller

DECLARATION OF SERVICE

I, Kerry Siekmann declare that on 8/17/10, I served and filed copies of the attached Terramar Opening Brief & Cover Letter dated 8/17/10. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[http://www.energy.ca.gov/sitingcases/carlsbad/index.html** . The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

For service to all other parties:

x_____sent electronically to all email addresses on the Proof of Service list;

_____ by personal delivery;

_____ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

__x_ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

OR

_____depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-6
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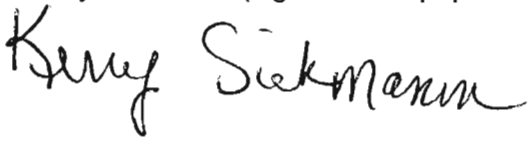
I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Kerry Siekmann (signature on paper copy mailed to the California Energy Commission)



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APPLICATION FOR CERTIFICATION
FOR THE *CARLSBAD ENERGY CENTER PROJECT*

Docket No. 07-AFC-6
PROOF OF SERVICE
(Revised 6/14/2010)

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